COMMONWEALTH OF MASSACHUSETTS

IN THE MATTER OF)	BROWNFIELDS COVENANT NOT TO SUE AGREEMENT
CITY OF MARLBOROUGH REDEVELOPMENT OF FORMER FRYE BOOT PROPERTY, 84 CHESTNUT STREET, MARLBOROUGH)))	DEP RTN 2-0011998

I. STATEMENT OF PURPOSE

- A. This Agreement is made and entered into by and between the Office of the Attorney General (the "OAG"), on behalf of the Commonwealth of Massachusetts (the "Commonwealth"), and the City of Marlborough (the "City"). Collectively, the OAG and the City are referred to as the "Parties."
- B. This Agreement is entered into pursuant to the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, as amended and codified in Massachusetts General Laws Chapter 21E ("G.L. c. 21E"), and the OAG's Brownfields Covenant Not to Sue Agreement Regulations at 940 CMR 23.00 ("Brownfields Covenant Regulations"), with reference to the Massachusetts Contingency Plan, 310 CMR 40.0000 (the "MCP"). This Agreement relates to the remediation and redevelopment of the 1.4 acre former John A. Frye Shoe Company facility at 84 Chestnut Street, Marlborough, Massachusetts, commonly known as the "Frye Boot" property, into housing for the elderly and/or the physically challenged, with some of the housing units meeting state affordability guidelines (the "Project").
- C. The Parties intend to set forth in this Agreement their respective duties, obligations and understanding so that the Project can contribute to the physical and economic revitalization of an area of Marlborough, Massachusetts. The Parties agree that this Agreement, pursuant to G.L. c. 21E, §3A(j)(3), addresses potential claims by the Commonwealth as to the City and is predicated upon the City's compliance with the terms and conditions of this Agreement. This Agreement also addresses potential claims brought by third parties for contribution, Response Action costs or property damage pursuant to G.L. c. 21E, §§ 4 and 5, or for property damage under common law. This Agreement also addresses potential claims for natural resource damages. This Agreement does not, however, address liability arising under contract law.
- D. The Parties agree that the City's ability to conduct the Project may be contingent upon independent approval processes of other departments, agencies and instrumentalities of the federal, state and local governments. Nothing in this Agreement should be construed as an endorsement by the OAG of the proposed project for such approval processes. The City's failure

to secure independent governmental approvals for the proposed project shall not excuse the City from performance of any term or condition of this Agreement.

E. The Commonwealth believes that this Agreement is fair, consistent with G.L. c. 21E and in the public interest, and has entered into this Agreement as part of an effort to revitalize an area of Marlborough, Massachusetts.

II. THE PARTIES

- A. The OAG is a duly constituted agency of the Commonwealth charged with the legal representation of the Commonwealth and maintains offices at One Ashburton Place, Boston, Massachusetts 02108. Included within the OAG's authority is the authority to enter into Brownfields Covenant Not to Sue Agreements pursuant to G.L. c. 21E, §3A(j)(3), which provides liability relief under G.L. c. 21E.
- B. The City is a municipal corporation duly organized under the laws of the Commonwealth, with a principal office at 140 Main Street, Marlborough, Massachusetts 01752. In accordance with this Agreement, the City shall undertake the Project as discussed in Section IV, Paragraph A, subparagraph 2, below.

III. STATEMENT OF FACT AND LAW

- A. The Commonwealth enters into this Agreement pursuant to its authority under G.L. c. 21E, §3A(j)(3), and the Brownfields Covenant Regulations.
- B. Unless otherwise expressly provided, terms used in this Agreement which are defined in the Brownfields Covenant Regulations shall have the meaning assigned to them under those regulations. Terms not defined in the Brownfields Covenant Regulations, but defined under G.L. c. 21E or the MCP, shall have the meaning assigned to them under G.L. c. 21E or the MCP. Terms used in this agreement which are defined in Brownfields Covenant Regulations, G.L. c. 21E, or the MCP are capitalized.
- C. The Project involves the redevelopment of the 1.4 acre "Frye Boot" property at 84 Chestnut Street, Marlborough, Massachusetts (the "Property"). The Property is more fully described in Exhibit A, attached and incorporated into this Agreement. A long history of industrial use has contaminated soil on the Property with heavy metals, petroleum hydrocarbons and polycyclic aromatic hydrocarbons.
- D. The Department of Environmental Protection ("DEP") has received notice of a Release of Oil and/or Hazardous Materials at or from the Property, and has assigned Release Tracking Number ("RTN") 2-011998 for this Release.
- E. The City is currently engaged in Response Actions at the Property pursuant to the MCP. The contaminated area subject to Response Actions is designated as the Site, as that term is defined at 310 CMR 40.0006, for the purposes of this Agreement. The Site is also the property addressed by this Agreement for the purposes of 940 CMR 23.08(1) in the Brownfields Covenant Regulations. The Site is more fully described on Exhibit B, which is attached and

incorporated into this Agreement. Exhibit B describes in detail the environmental conditions, including the nature and extent of contamination suspected to exist, at the Site.

IV. COMMITMENTS AND OBLIGATIONS

In consideration of the representations made and promises exchanged by and between the Parties, each of them covenants and agrees to the terms and conditions which follow.

A. REPRESENTATIONS AND COMMITMENTS BY THE CITY

- 1. The City represents that:
 - a. it is an Eligible Person;
- b. it is not at the time of execution of this Agreement a person with potential liability for the Site pursuant to G.L. c. 21E other than through its status as an owner and/or operator pursuant to clause (1) of paragraph (a) of Section 5 of G.L. 21E;
- c. it did not cause or contribute to the Release of Oil or Hazardous Material from or at the Site and did not own or operate the Site at the time of the Release;
 - d. its involvement with the Site has been limited to:
 - i. evaluating the Property for purposes of acquiring the

Property;

- ii. negotiating to acquire and acquiring the Property;
- iii. communicating with the Commonwealth and local authorities with respect to the design and planning of the Project and various permitting issues with respect to the Property; and
- iv. participating in Response Actions at the Site in accordance with G.L. c. 21E and the MCP;
- e. none of its activities has caused or contributed to the Release or Threat of Release of Oil and/or Hazardous Material at the Site under G.L. c. 21E and/or the MCP; and
- f. it is not at the time of execution of this Agreement subject to any outstanding administrative or judicial environmental enforcement action arising under any applicable federal, state or local law or regulation.
 - 2. The City agrees to the following terms and conditions:
 - a. The City shall endeavor to complete the redevelopment aspect of

the Project by redeveloping the Property into at least 57 units of housing for the elderly and/or physically challenged, with at least 40 percent of the units meeting the Massachusetts Department of Housing and Community Development's ("DHCD's") definition of "affordable." The City will seek requests for proposals from developers to develop the Property based upon criteria established by the City. Those criteria will require that the Property be developed into independent living or assisted living units for the elderly and/or physically challenged, with at least 40 percent of the units meeting DHCD's definition of "affordable." A copy of the comprehensive redevelopment plan for this Project is attached as Exhibit C.

- b. With respect to contamination at the Property, the City shall either achieve, or arrange for the achievement and maintenance of a Permanent Solution at the Property and the Site in accordance with G.L. c. 21E and the MCP.
- c. The City shall also cooperate fully with DEP. To cooperate fully includes, without limitation:
- i. providing prompt and reasonable access to the Property to DEP for any purpose consistent with G.L. c. 21E and the MCP, and to other persons intending to conduct Response Actions pursuant to G.L. c. 21E and the MCP;
- ii. complying with the Release notification provisions established by G.L. c. 21E and the MCP;
- iii. responding in a timely manner to any request made by the DEP or OAG to produce information as required pursuant to G.L. c. 21E;
- iv. taking reasonable steps to prevent the exposure of people to Oil and/or Hazardous Materials by fencing or otherwise preventing access to the Site;
- v. taking reasonable steps to contain any further Release or Threat of Release of Oil and/or Hazardous Material from a structure or container, upon obtaining knowledge of a Release or Threat of Release of Oil and/or Hazardous Material; and
- vi. conducting, or causing to be conducted, Response Actions at the Site in accordance with G.L. c. 21E, the Standard of Care defined in G.L. c. 21E, and the MCP.

B. COVENANT NOT TO SUE BY THE COMMONWEALTH

1. The City

Pursuant to G.L. c. 21E, §3A(j)(3), in consideration of the representations and commitments by the City set forth in Section IV, Paragraph A of this Agreement, and subject to the City's compliance with the terms and conditions of this Agreement and the Termination for Cause provisions described below in Section IV, Paragraph B, subparagraph 5, the Commonwealth covenants not to sue the City, pursuant to G.L. c. 21E, for Response Action

costs, contribution, natural resource damages or injunctive relief relating to any Release of Oil and/or Hazardous Material occurring at the Site prior to the execution of this Agreement, so long as the Release of Oil and/or Hazardous Material is fully described and delineated in the Response Action Outcome ("RAO") Statement to be submitted to DEP with respect to the Site, and the Response Actions upon which the RAO Statement relies meet the Standard of Care in effect when the RAO Statement is submitted to DEP. The Commonwealth's covenants in this Paragraph shall vest on the effective date of this Agreement as defined in Section IV, Paragraph E, subparagraph 5. This Agreement shall not affect any liability established by contract.

2. Subsequent Owners and/or Operators

The Commonwealth covenants not to sue Eligible Persons who are successors, assigns, lessees or licensees of the City's real property interests in the Property, or who are lessees or licensees of the City's successors and assigns (the "Subsequent Owners and/or Operators"), pursuant to G.L. c. 21E, for Response Action costs, contribution, natural resource damages or injunctive relief relating to any Release of Oil and/or Hazardous Material occurring at the Site prior to the execution of this Agreement, so long as the Release of Oil and/or Hazardous Material is fully described and delineated in the RAO Statement submitted to DEP with respect to the Site, and the Response Actions upon which the RAO Statement relies meet the Standard of Care in effect when the RAO Statement is submitted to DEP. The liability relief available to Subsequent Owners and/or Operators shall be subject to the same terms and conditions as those that apply to the City.

3. Applicability of the Agreement

This Agreement shall be in effect unless and until the statutory protections available to the City or Subsequent Owners and/or Operators pursuant to G.L. c. 21E, §5C are in effect. This Agreement is subject to the Termination for Cause provisions described below in Section IV, Paragraph B, subparagraph 5.

4. Reservations of Rights

The Commonwealth's covenants in this Agreement shall not apply to:

- a. any new Release of Oil and/or Hazardous Material at or from the Property that occurs after the date of execution of this Agreement;
- b. any Release of Oil and/or Hazardous Material which the City or any Subsequent Owner and/or Operator causes, contributes to, or causes to become worse;
- c. any Release of Oil and/or Hazardous Material at the Site that has not been discovered when an RAO Statement is submitted to DEP that would have been discovered if an assessment of the Site covered by or addressed in the RAO Statement had been performed consistent with the Standard of Care in effect when the RAO Statement was submitted;

- d. any Release or Threat of Release of Oil and/or Hazardous Material from which there is a new exposure that results from any action or failure to act pursuant to G.L. 21E during the City's or a Subsequent Owner's and/or Operator's ownership or operation of the Property;
- e. any Release of Oil and/or Hazardous Material not expressly described in Section IV, Paragraph B, subparagraph 1, above; and
- f. any claims (i) for damages for injury to, destruction of, or loss of natural resources due to a Release of Oil and/or Hazardous Material occurring after the execution of this Agreement, (ii) for exacerbation of injury to, destruction of, or loss of natural resources due to a Release of Oil and/or Hazardous Material occurring either before or after the execution of this Agreement, and (iii) for the costs of any natural resource damage assessment relating to conditions first caused or exacerbated after the execution of this Agreement; and (iv) for damages for injury to, destruction of, or loss of natural resources due to a Release of Oil and/or Hazardous Material not expressly described in Section IV, Paragraph B above.

5. Termination for Cause

- a. If the OAG or DEP determines that the City submitted materially false or misleading information as part of its Application to Enter into a Brownfields Covenant Not to Sue Agreement, the OAG may terminate the liability protection offered by this Agreement in accordance with subparagraph 5.c., below. A statement made by the City regarding the anticipated benefits or impacts of the proposed Project will not be considered false or misleading for purposes of this subparagraph if the statement was asserted in good faith at the time it was made.
- b. In the event that the OAG or DEP determines that the City or a Subsequent Owner and/or Operator has violated the terms and conditions of this Agreement, including, but not limited to, failure to pursue development of the Project, failure to achieve or arrange for the achievement and maintenance of a Permanent Solution at the Site in accordance with G.L. c. 21E and the MCP, or failure to arrange for a timely response to a Notice of Audit Finding or any such other Notice requiring additional work to achieve or maintain a Permanent Solution at the Site, the OAG may terminate the liability protection offered by this Agreement in accordance with subparagraph 5.c., below. In the event that the liability protection is terminated solely because of a violation of one or more of the conditions set forth in 940 CMR 23.08(3)(a) through (d) by a Subsequent Owner and/or Operator, the termination shall affect the liability protection applicable only to that Subsequent Owner and/or Operator.
- c. Before terminating the liability relief provided by this Agreement, the OAG will provide the City or a Subsequent Owner and/or Operator, as appropriate, with written notice of the proposed basis for, and a 60-day opportunity to comment on, the proposed termination. If the OAG, in its sole discretion, deems it appropriate, the notice shall provide a reasonable period of time for the City or a Subsequent Owner and/or Operator to cure an ongoing violation in lieu of termination of the liability relief provided by this Agreement.

d. Termination of liability relief pursuant to this section shall not affect any defense that the City or a Subsequent Owner and/or Operator might otherwise have pursuant to G.L. c. 21E.

C. COVENANT NOT TO SUE BY THE CITY AND ANY SUBSEQUENT OWNER AND/OR OPERATOR

In consideration of the Commonwealth's covenants not to sue in Section IV, Paragraph B, the City and Subsequent Owners and/or Operators covenant not to sue and not to assert any claims or causes of action against the Commonwealth, including any department, agency, or instrumentality, and its authorized officers, employees, or representatives with respect to the Site or this Agreement, including, but not limited to:

- 1. any direct or indirect claims for reimbursement, recovery, injunctive relief, contribution or equitable share of response costs or for property damage pursuant to G.L. c. 21E;
- 2. any claims for "takings" under the Fifth Amendment to the United States Constitution, under the Massachusetts Constitution, or under G.L. c. 79;
- 3. any claims arising out of Response Actions at the Site or the Property, including claims based on DEP's selection of Response Actions, oversight of Response Actions, or approval of plans for those activities;
- 4. any claims or causes of action for interference with contracts, business relations or economic advantage; or
 - 5. any claims for costs, attorneys fees, other fees or expenses incurred.

D. CONTRIBUTION PROTECTION AND RIGHTS OF AFFECTED THIRD PARTIES

With regard to any Release of Oil and/or Hazardous Material occurring at the Site prior to the execution of this Agreement, so long as the Release of Oil and/or Hazardous Material is fully described and delineated in the RAO Statement submitted to DEP with respect to the Site, and the Response Actions upon which the RAO Statement relies meet the Standard of Care in effect when the RAO Statement is submitted to DEP, the City and any Subsequent Owner and/or Operator are entitled to the protection G.L. c. 21E, §3A(j)(3), provides from claims for contribution, cost recovery or equitable share brought by third parties pursuant to G.L. c. 21E, §8 4 and/or 5, or third party claims brought for property damage claims under common law or G.L. c. 21E, §5, based solely on the status of the City or any Subsequent Owner and/or Operator as owner or operator of the Property or the Site, provided, however, that:

- 1. The City has satisfied the notification provisions of G.L. c. 21E, $\S3A(j)(3)$, and 940 CMR 23.06(1); and
- 2. the OAG has provided Affected Third Parties an appropriate opportunity to join this Agreement pursuant to 940 CMR 23.06(2) and (3).

E. GENERAL PROVISIONS

- 1. This Agreement may be modified only upon the written consent of all Parties.
- 2. If any court of competent jurisdiction finds any term or condition of this Agreement or its application to any person or circumstance unenforceable, the remainder of this Agreement shall not be affected and each remaining term and provision shall be valid and enforceable to the full extent permitted by law.
- 3. Each Party warrants and represents to the others that it has the authority to enter into this Agreement and to carry out its terms and conditions.
- 4. This Agreement may be fully executed by all Parties in one or more counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument.
- 5. The terms of this Agreement shall be effective as of the date it is fully executed by all Parties.

IT IS SO AGREED:

OFFICE OF THE ATTORNEY GENERAL	THE CITY OF MARLBOROUGH
By: Der	Signed: Many Sura
Benjamin J. Ericson Assistant Attorney General	Name (printed): Nancy E. Stew
Brownfields Unit Chief Office of the Attorney General	Title: Mayor
One Ashburton Place Boston, MA 02108	Date: 2/2/06
	·
Date: 3/16/66	Janu Cyoulia
	Janu Daniel Gould

In the Matter of City Of Marlborough Redevelopment of 84 Chestnut Street, Marlborough Brownfields Covenant Not To Sue Agreement

EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS

By:

Stephen R. Pritchard

Secretary

Executive Office of Environmental Affairs

Commonwealth of Massachusetts

100 Cambridge Street Boston, MA 02108

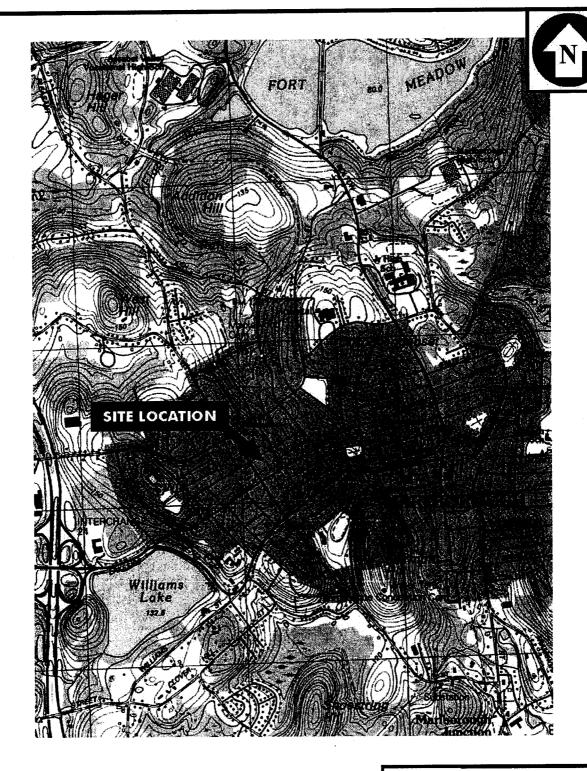
Date: 3 20 06

EXHIBIT A

SITE LOCATION AND DESCRIPTION

The Former Frye Boot Site is located at 84 Chestnut Street in Marlborough Massachusetts. The Site is identified by the City of Marlborough Tax Assessor's Office on Map 69 as parcel nos. 76, 76A, and 92, and totals approximately 1.4 acres. The property is currently vacant; and City demolished the former Site buildings in the fall on 1998. A chain link fence surrounds the entire property and restricts access to the property by unauthorized persons.

The Site is bounded on the northwest by Chestnut Street and on the southwest by Pleasant Street. The Site is abutted on the northeast by residential properties located along Howland Street. Commercial and industrial properties abut the Site to the southeast. Residential properties and a L'il Peach convenience store are located to the northwest of the Site, across Chestnut Street. A fire station and a residential dwelling are located southwest of the Site, across Pleasant Street. The location of the Site is shown on Figure 1 and the Site layout is depicted on Figure 2.



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' X 15' USGS TOPOGRAPHIC QUADRANGLE: MARLBOROUGH, MA 1983

> 2000 3000 1000

> > scale in feet



QUADRANGLE LOCATION

FORMER FRYE BOOT SITE 84 CHESTNUT STREET MARLBOROUGH, MA

SITE LOCATION PLAN

Boott Mills South 116 John Street Lowell, Massachusetts 01852 978-970-6600

DRAWN: HWB

SCALE: AS SHOWN Date 9/20/05 CHECKED: JIC

FIGURE

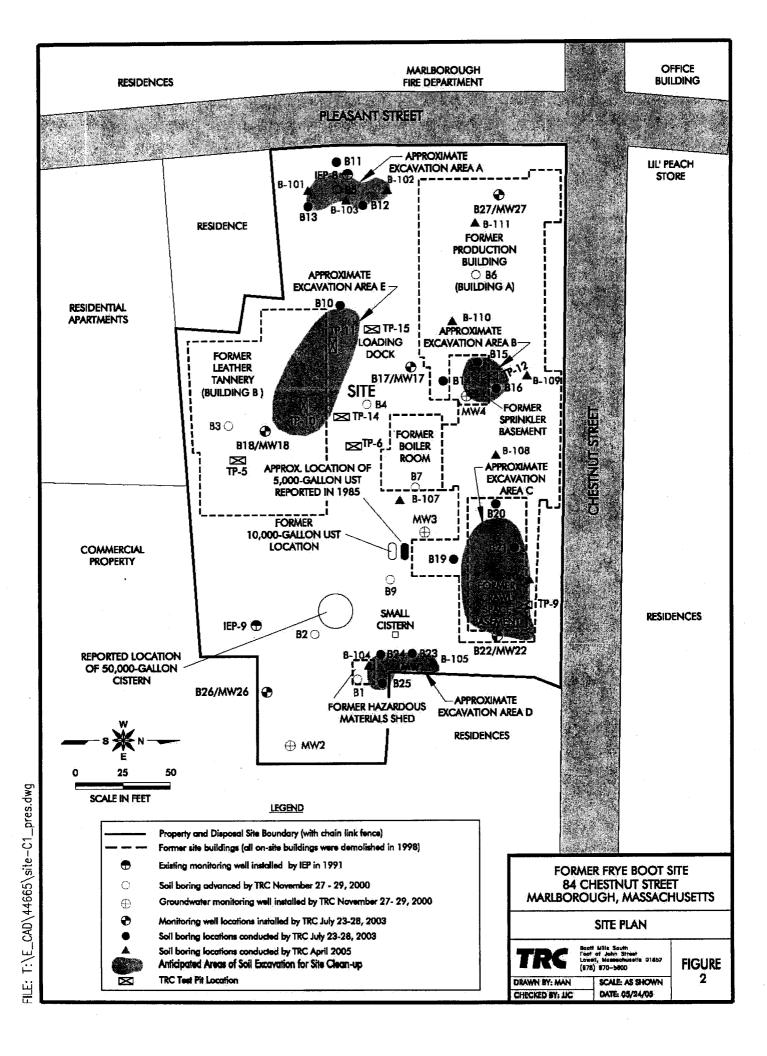


EXHIBIT B

REGULATORY STATUS

The Site is listed by DEP as Release Tracking Number (RTN) 2-11998. The City reported the Site to DEP in July 1997 when the City took temporary ownership of the property in order to demolish unsafe on-Site buildings. At that time, the City obtained an October 1990 subsurface investigation report, prepared by Metcalf and Eddy (M&E)/Zecco, that revealed the presence of oil and grease and heavy metals in soil at levels exceeding applicable DEP Reportable Concentrations (RCs). Chromium and lead were also detected in Site groundwater at levels exceeding the applicable DEP RCs. Based on these Site data, the City determined that notification to DEP was required pursuant to the MCP.

The Site is currently listed as a default Tier ID Site on the DEP Sites list. TRC is in the process of completing a Phase II Comprehensive Site Assessment (CSA) Report that will be used to support a Tier Classification for the Site. The Phase II CSA and Tier Classification submittal will be provided to DEP prior to implementing this RAM. Based on the available site data, TRC anticipates that the Site will be classified as a Tier II Site under the MCP.

SITE HISTORY

The Site has a history of industrial use dating from the 1860s when the property was developed for shoe-manufacturing operations, to the 1990s when a portion of the Site was occupied by a small machine shop. The John A. Frye shoe company occupied the Site between 1865 and 1989. The Frye Boot factory included a rectangular production building (Building A) along Chestnut Street, and a second building that was used as a tannery and curry shop (Building B) for the softening of leather. Both buildings included below-grade basements. Historical Site features are shown on Figure 2.

Hazardous substances formerly used and stored on the Site in association with the production of shoes and leather products may have included dyes, adhesives, and solvents. Hazardous substances identified during inspections of the Site by various consultants prior to 1991 included acetone, adhesives, black filler, cleaning solutions, kerosene, lacquers, lubricants, motor oil, neutralizing amine, paints, paint thinners and removers and sweeping compound.

Previous environmental assessment reports available for the Site reference the historical disposal of wastewater from former leather tanning and shoe operations into a reported 50,000-gallon stone cistern located near the southeastern portion of the Site. The reported cistern was not located during the extensive subsurface assessment activities performed by TRC and others. A smaller, 6-foot deep concrete cistern with a metal cover is currently present on Site near a manhole in the former factory's eastern parking lot. Petroleum products were used on Site to operate and maintain the former automated shoe manufacturing machinery. Petroleum products were also reportedly used at the Site as leather treatments and during the currying process, which took place in Building B

between 1900 and 1936. Currying involves working oil and grease into hard leather to soften it.

No. 2 heating oil was used to fuel the former on-Site boilers. In 1998, Rizzo Associates removed a 10,000-gallon underground storage tank (UST) from the property as part of a RAM that involved demolition of the former on-Site buildings. The former 10,000-gallon UST was located approximately 30 feet east of the former boiler room area that was connected to the south side of Building A (see Figure 2). According to the RAM Completion Report prepared by Rizzo, dated July 22, 1999, soil samples from former UST excavation did not contain concentrations of EPH or VPH constituents above applicable regulatory criteria.

Available Fire Department records for the Site also reference a 5,000-gallon steel UST; however, the location of the 5,000-gallon UST was not specified in Fire Department records, nor were any records documenting removal of the 5,000-gallon UST found in the Fire Department files. An "Environmental Audit Report" for the Site prepared in 1985 by Bewick Associates indicated the 5,000-gallon UST was located below a parking area at the eastern, rear corner of Building A; the same approximate location from which the 10,000-gallon UST was removed by Rizzo. Therefore, it appears that the size of UST's on Site may have been misstated in previous reports, or that the 5,000-gallon UST was replaced by a 10,000-gallon UST sometime after 1985.

Between November 2000 and April 2005, TRC completed a series of subsurface investigations at the Site as part of the City's Brownfields Assessment Program. The investigations included completion of a ground-penetrating radar survey, excavation of several test pits and advancement of soil borings throughout the Site. Soil and groundwater samples were collected and submitted for laboratory analyses. The results of these assessment activities indicated the presence of metals, primarily arsenic and lead, and some polynuclear aromatic hydrocarbons (PAHs) in soil at concentrations exceeding MCP Method 1 S-1 soil standards in a few localized areas. Additional soil sampling was recently completed by TRC in April 2005 to refine the estimated volume of soil requiring remediation.

Table 1 contains a summary of the historic soil sample results for the subject Site. As shown in Table 1, concentrations of lead, arsenic, barium and select PAHs are present in a few soil samples above MCP Method 1 S-1/GW-3 soil standards. Test pit, soil boring and groundwater monitoring well locations are shown on Figure 2.

TRC collected groundwater samples at the Site in December 2000 and August 2003. The samples were submitted for laboratory analyses of one or more of the following parameters: volatile organic compounds (VOCs), extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (HPH), hexavalent chromium, and cyanide. As shown in Table 2, with the exception of the cyanide concentrations detected in monitoring well IEP-9 (December 2000), none of the aforementioned constituents were detected at concentrations exceeding their applicable MCP Method 1 GW-2 or GW-3 groundwater standards during either of the two sampling rounds. Monitoring well IEP-9

was re-sampled for cyanide in August 2003 and detectable concentrations of cyanide were present in this well. The elevated concentrations of cyanide detected during the December 2000 sampling round were attributed to high suspended solids content in samples at that time.

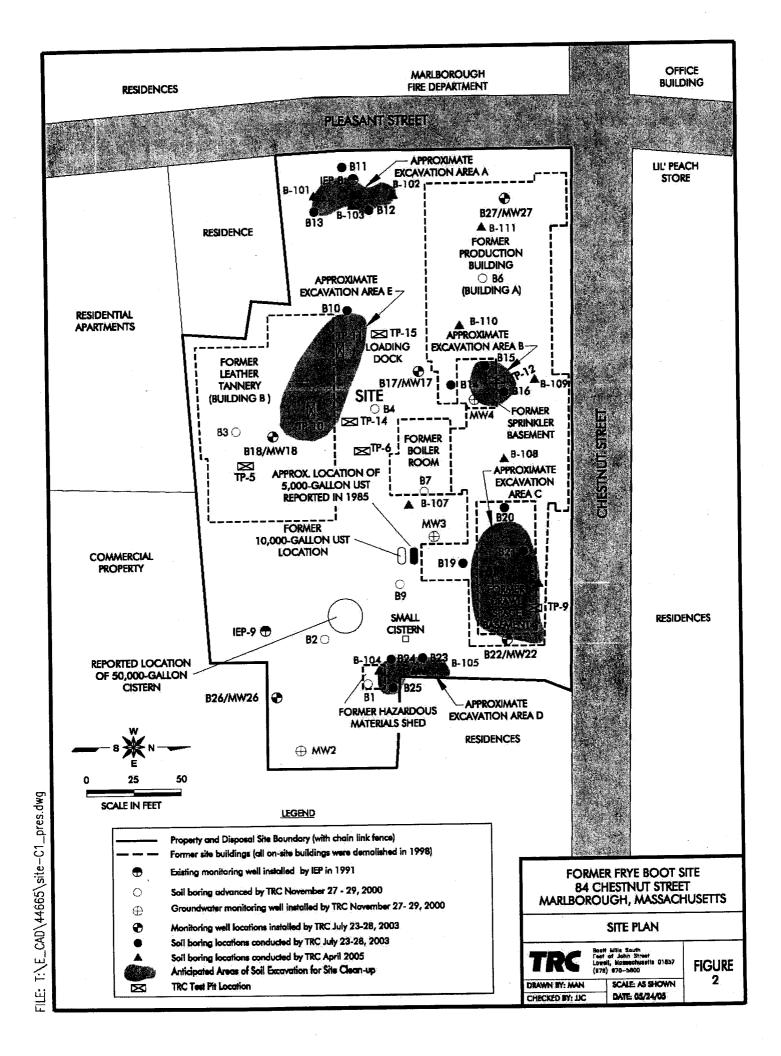


Table 1 Summary of Soil Analytical Results 2000-2005
Former Frye Boot Site
Mariborough, MA

SVOCs (mg/kg)		(mg/kg) (mg/kg)	Analysis VOCs (mg/kg)
4-Methylphenol Auphthalene 2-Methylnaphthalene Aconaphthylene Aconaphthene Aconaphthene Decazofican Fluorene Plenanstirene Anthracene Eprocaphane Eprocaphane Eprocaphane Eprocaphane Eprocaphane Eprocaphane Eprocaphane Eprocaphanethene Berzo(a)pyrene Berzo(a)pyrene Berzo(a)pyrene Berzo(a)pyrene Berzo(a)pyrene Berzo(a)pyrene Debazo(b)husenthrecene	Naphtheiere 2.44ethytaphtheiere Acenaphthyere Acenaphthee Fluorene Phenanthene Phenanthene Phenanthene Phenanthene Benzo(a)nhracene Benzo(b)nkuranthene	C9 - C10 Aromatics C9 - C12 Aliphatics Naphthaliene C9 - C18 Aliphatics C19 - C38 Aliphatics C11 - C22 Aromatics	Analyte Trichlorofluoromethane Acetone Methylene Chloride Calcodorn m.p-Xylene Xylene (Total)
100 100 100 100 1000 1000 1000 1000 10	100 500 100 1,000 1,000 1,000 1,000 1,000 1,000 1,000 0,7 7 7 0,7 0,7 0,7 0,7	1,000 1,000 1,000 2,500 800	10
NS 100 100 100 100 100 100 100 100 100 10	100 100 100 100 1,000 1,000 1,000 1,000 1,000 700 0,7 7 0,7 7 0,7 0,7 0,7	100 1,000 100 2,500	S-1/GW-3 NS 80 100 100 200 500
			Sample Location Depth (feet) Date Sampled
:	0.29 U 0.29 U 0.29 U 1.2 0.3 1.7 1.5 0.89 0.72 0.51 0.51 0.52 0.53		1 15 2
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.29 U NA NA NA NA NA NA NA 10.29 U 2.5 2.1 11 11 12 0.46 0.76 0.78 0.78 0.78 0.78		11/20/2000 NA NA NA NA
: ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	NA N	0.74 0.8 U 55 U	11/20/2000 NA NA NA NA
5	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	N N N 0.8 0.8	2 8
0.27 0.38 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	NA N	3.4 0.48 58 U 860	11/20/2000 NA NA NA
5	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	*	11/20/2000 NA NA NA NA NA NA NA
5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	* * * * * *	0.25 U 0.005 U
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3 3 3 3 3	0-2 11/27/2000 NA NA NA NA
:		0.78 U 0.16 U 55 U	11272 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
5	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3 3 3 3 3 3	-8 1/2000
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	•	0.93 0.19 55 U	8-10 11/28/2000 NA NA NA NA

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Marlborough, MA

				Tomas I - Town	40.0	40.00	TP-10	TP-10 Dun	TP-12	TP-12 Oup	- -	29	,	2	
Analysis	Analyte	M CO	MCP Method 1	Sample Location	2					. «	3	0-5	8-9	89	8-10
				Depth (feet)	•	90	p			0000000	11000000	440770000	11/27/2000	11/28/2000	11/28/2000
		S-1/GW-2	S-1/GW-3	Date Sampled	11/20/2000		11/20/2000	11/20/2000	8	D002/02/11	0002/02/11	100211211			
		é	ou		ΑN	¥	NA.	≨	≨	¥.	ΝA	¥	¥	¥	ž
H		000	3			42	٧Ž	¥2	ž	¥	¥	¥	Ν	Ϋ́	¥
CB Aroclors	,	2	,		ž	5			ļ	ļ	٩	٤	7.7	15	Ą
Section 1	America	30	30		=	¥	=	_ Ž	17	9	2	:	1	• ;	
	2000	8	5	,	470	¥	200	Ϋ́Z	1,000	1.300	23	180	<u>.</u>	670	¥ Z
(mg/kg)	Barrum	3 8			1 090	Ą	0.7 U	¥.	1.1	1.1	7	0.74 U	0.65 U	D 69.0	¥
	Cadmium	9	3 5			42		¥	22	74	\$	28	2	8	ş
	Chromium	1,000	000,1		Q :	£ :	: :			50	. 99	120	8.4	=	Ϋ́
	Lead	300	300		8	ž	3	£ :	3 3				11 2000	0.12	Ą
	Mercury	8	2		0.31	¥	0.029 U	ž	8	80.5	-	} :			2
	Nickel	300	300		¥	ž	¥	¥	₹	ž	₹ Ž	₹		:	§ ;
	i was	9	٤		4	¥	44 C	ž	12 C	= =	-	<u>=</u>		- -	ž
	Corenium	9 9	9			4	2	ž	7 C	7	2	2.1 U	1.8 C	1.9	ž
	Silver	3	3 ⋅		2 ;		1 12	. A	42	¥	ž	ž	ž	ž	¥
	Thallium	•		_	ž:	£ :	£ :	£ \$	42	4	¥	ž	ž	¥	¥
	Vanadium	00	8		¥ :	\$ \$	¥ 2	2	£ \$	ž	ž	ş	ž	NA	ΑN
	Zinc	2,500	2,500		Š			1	V.	ΨN	Ą	ž	ž	ΑN	ΝΑ
TCLP and RCRA	TCLP lead (ug/L)	NS	Ş		¥	ž	5	<u> </u>		N.A	ΨN	2	ž	¥X	ž
Characteristics	ignitability (*f)	SS	NS		ž	ž	¥.	5	5		1	44	ΨN	ΨN	Ą
	pH (s.u.)	SN	NS		¥	¥	¥	ž	¥.	¥.	2		12	4 N	¥2
	Reactive Sulfide (marka)	SK	NS		¥	¥	¥	¥	ž	ž	¥	ž			2
	Describe Cypride (mg/kg)	SZ	SN		Ą	¥	¥	¥	¥	AA	¥	ž	¥	¥.	4
	Bullion of the party of the par														

All unit mg/kg unless otherwise specified.

As I unit mg/kg unless otherwise specified.

As I unit in mg/kg unless otherwise specified.

NS - No standards exist for this compound.

• - Natural in the standards exist for this compound.

• - Soil containing one sathwood ash.

(1) - No fash at 140°F.

NA - Not analyzed for the listed analyze.

NO - None detected; quantitation limits below listed MCP criteria.

SVGcs - Semi-outside Organic Compounds.

PCB - Polychhorinated Biphenyi.

* - degrees Frentheit.

Vocs - Volatie Organic Compounds.

U - Commound was not detected at specified quantitation limit.

VOCs - Volatie Organic Compounds.

STH - Total benotebum hydrocartorns.

ugh - micrograms ser liter.

800 11,00 Depth (fee 0.091 0.091 0.022 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023

c c c c

(mg/kg)

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Marlborough, MA

(mg/g

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Mariborough, MA

								¥		B.A	1-B	-	æ0	6	6
gjarjeov	Analyte	MCP Method	tethod 1	Sample Location		24		أُ	ı	3	ı	ı		ļ	0 40
Alidiyələ				Danith Manet	87	8.8	10-12	2.4	P-12	2	3	5	?	ç	2
				near) inder	44.70000	41797000	11/28/2000	11/28/2000	11/28/2000	11/28/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000
-		S-1/GW-2	S-1/GW-3	Date Sampled	1120/2000	00070711							ΨN	ΨN	ΨN
		900	000		¥	≨	₹	¥	¥	AA	¥	Š	5		
HAL					×.×	ş	Į.	ďΖ	Ϋ́	¥	WA	¥	¥	¥	ž
PCB Aroclors		2	7		5				ŀ	ļ	٤	١	7.	14	¥
- Jakalia	Amenic	30	30		2	2	ď Z	=	=	=	:	:	: ;	•	
			8		ŧ	5	ž	5	-	92	120	-	8		Ę
(mg/kg)	Barkm	3	3			:	-	- 10	0 80	0.68	0.67 U	O.86	0.7 U	0.72 U	¥
	Cadmium	8	30		0.67		٤ :					2	z	75	ž
	Chromium	1,000	1,000		28	28	¥	13	2	8	,	:	:		-
		900	۶		76	9.6	¥	810	7.6	7	=	7	2	3	<u> </u>
	Cead	2000	3				-	96 0	11 0000	D 03	0.029 U	0.029 U	0.028 ∪	0.048	≨
	Mercury	8	8		0.03	0.03	ž	0.20		,		47	4	ΨN	Y.
	le de la	300	300		¥	≨	¥	¥	<u> </u>	ž	_	<u> </u>	<u> </u>	:	
	a constant		ξ		± 0	-	ž	2	F	2	<u>-</u>	<u> </u>	=	- - -	ž
	Selenium	3	3 (: 0		Ą	,	13	1.9 U	1.8 U	1.8 ∪	7	2	ž
	Silver	100	3				{	' :		*	42	Ą	NA NA	ž	ž
	Thallium	•	æ		ž	ž	<u></u>	ž	Ę	ç	£ :	: :		•	Š
	the state of the	400	400		ž	¥	¥	ž	ž	ž	¥	ž	ž:	£ :	£ ;
	Validulari	5	2500		Ą	ž	¥	ž	ž	¥	Α¥	ž	¥	¥Z	ž
	Zmc					1	N.	42	ΨN	ΑN	ΥN	¥	ž	NA	¥
TCLP and RCRA	TCLP lead (ug/L)	SZ	SN		¥2	5		1	NA.	٩N	ΨN	≨	ž	ΝA	ž
Characteristics	Ignitability (*f)	SS	SN		ž	ž	£				***	Į.	ΨN	Ą	ž
	oH (s.u.)	SN	SS		Ϋ́	¥	¥	ď	ž	ž	5			414	42
	Describe Suffice (motion)	S	SN		¥	ş	Ϋ́	Ą	¥	ž	ž	ž	2	\$ 1	5
	Occation County (molte)	SZ.	SN N		¥	¥	ΑN	ΑV	¥	¥	¥	¥	¥.	ž	٤

Notes:

All unit in maying unless otherwise specified.

All unit in maying unless otherwise specified.

In gridge - militizants per kilogrant (dry weight) or parts per militon (ppm).

NS. No standards exist for this compound.

- Natural soil.

(1) - No flesh at 140°F.

(1) - No flesh at 140°F.

NA. Not avaizated for the isleed analyse.

ND. None detected; quantitation limits below listed MCP criteria.

NOCD: - Seminotatis Granic Compounds.

PC - Represe f seminel.

PC - Represe f seminel.

Volce - Seminotatis Bipheny.

- Compound was not detected at specified quantitation limit.

VOCs - Voisitis Organic Compounds.

TIPH - Total Peroleum hydrocarbons.

ult. - incrograms per liter.

s.u. - standard units.

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Marlborough, MA

							•														(Auffin)	(marker)	SVOC.																		,	(mo/kg)		(mg/kg)	VРН					(mg/kg)	VOCA			Analysis
Carbazole	Benzo(g,h,i)perylane	Dibenzo(a,h)anthracene	indeno(1,2,3-co)pyrene	1 de 1/4 3 3 cellons	Benzo(a)nome	Benzo(k)fluoranthene	Benzo(b)fluoranthene	bis(2-Ethylhexyl)phthaiate	Chrysene	Benzo(a)anthracene	Ругила		Ehronothana	Anthracene	Phenanthrene	Fluorene	Dibenzofuran	Acenaphmene	Acenaphrayiene	2-Mediyinabirdasird	2 state de la constitución de la	Nachthaiana	4-Methylphenol	Benzo(ghi)perylene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene	Benzo(k)fluoranthene	Benzo(b)fluoranthene	Chrysene	Benzo(a)anthracene	Pyrene	Flyoranthene	Anthracene	Phenanthrene	Fluorene	Acenaphthene	Acenaphthylene	2-Methylnaphthalene	Naphthalene	C11 - C22 Aromatics	C19 - C36 Aliphatics	wapnmaene	C9 - C12 Aliphatics	C9 - C10 Aromatics	Xylene (Total)	m.p-Xylene	Chloroform	2 Bullion City and	Acetorie Charide	Trichlorofluoromethane			Analyte
NS.	1.000	0.7	5	7 :	0.7	7	0.7	NS	7	0.7	è	1.00	3	000	1,000	1,000	N	1,000	ē	200	e d	3	SN	1,000	0.7	0.7	0.7	7	0.7	7	0.7	700	1,000	1,000	1,000	1,000	1,000	1 00	500	ŝ	800	2,500	100	1,000	100	NS.	500	i 6	÷ 6	<u> </u>	3 %	S-1/GW-2		MCP
NS	1,000	0.7	5	0.7	0.7	7	0.7	NS.	7	0.7	È	300.	3		ź	1,000	V.	1,000	Ē	3 8	3 3	ġ	SN	1,000	0.7	0.7	0.7	7	0.7	7	0.7	700	1,000	ī,000	ē	1,000	1,000	8	50	8	80	2,500	3 8	1,000	100	NS	500	200	3 6	j 8	8 %	S-1/GW-3		MCP Method 1
																																													-							Date Sampleo	Depth (feet)	Sample Location
₹	ž	Š	3	Z	ž	ž	Š	Š	×	×	3	Z =	Š	ž	Š	ž	3	Š	3	3	ξ :	Š	Ž	NA	₹	ş	¥	Š	Ž	Ş	ξ	₹	ž	ž	ž	₹	×	N A	ž	ž	ž	₹ 5	3	. ¥	₹	Ä	₹	× :	Z	\$ 3	;	Τ-		
×	₹	Š	3	Z	₹	Š	₹	₹	ž	ş		Z ;	ξ	ž	₹	\$, z	3	: 3	3	2	ξ	Š	ı	0.29 U	0.29 U							0.29 U	0.29 U	0.29 U	0.29 U	_	ž	ž	_		& &	Н	2 12		Š	ž	ξ.	¥ ;	Z 3	2 2	11/27/2000	8-10	MW-1
¥	₹	\$	- 3	2	₹	₹	₹	₹	₹	\$	3	¥ ;	Š	ž	₹	₹	3	3	;	= 3	2	₹	Ā	₹	₹	ξ	ξ	ξ	ş	\$	₹	₹	₹	₹	₹	3	¥	₹	₹	₹	ž	₹ 5	3	3	₹	₹	₹	₹ :	ξ ;	₹ ₹	3	11/27/2000	0-2	<u> </u>
×	ž	3	: 3	ξ	Š	ξ	\$	ž	š	ş	· 3	¥ ;	¥	ž	\$	ζ	3	. š	= 3	2	<u>Z</u>	₹	2	0.27 U	0.27 U	0.27 U	0.27	0.27	0.27	0.27	0.27	0.27	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	₹	¥	·	5 <u>4</u>	Z :	1	0.78		Š	¥	₹ :	2	₹ ₹	3	11/27/2000	10-12	¥-2
ΝĀ	₹	5	: ;	₹	¥	¥	₹	š	š	3	; ;	ž ;	₹	ž	ž	3	3	3		2	Z	ž	Š	NA	ž	ž	ξ	ş	3	Š	3	\$	ξ	ž	ž	ž	₹	ž	¥	ξ	ž	ξ.	3	;	₹	¥	ž	₹ :	ξ :	₹ 3	Z Z	11/29/2000	3	3
*	₹	\$: ;	ξ.	ξ	ž	\$	\$	ξ	3	= 3	Z :	₹	₹	ξ	3	3	- 3	÷ 5	Z :	₹	₹	₹	0.28 U	0.28 U	0.28 U		0.28						0.28 U	0.28 U	0.28 U	0.28 U	ξ	₹	_	-	S		0.82		₹	ξ	\$	E	₹ 3	3	11/29/2000	8-10	N-3
₹	₹	3		ž	ž	ş	Š	ž	š	3	. ·	Z :	₹	3	ž	š	3	- ·		3	ž	₹	Ā	NA A	₹	ξ	\$	3	3	3	3	3	\$	ž	\$	₹	ž	ž	¥	¥	ξ	₹ :	2 3	3	\$	¥	ž	¥ :	Z	₹ 3	3	11/29/2000	\$	3
N	š	Š	: ;	¥	ž	¥	ž	¥	ž	3		Z ;	ξ.	ξ	ž	ş	3		÷ ;	Z :	\$	₹	Š	0.28 U	0.28 U	0.28 U								0.28 U			0.28 U	ž	₹			8 1	Ł			ž	ξ	₹ :	Z	₹ 3	3	11/29/2000	8-1 0	W-4
₹	₹	3	= }	₹	₹	₹	₹	\$	3	3	=	ξ.	₹	₹	₹	ξ	3			ž ;	\$	₹	¥	0.28 U		_	0.28							0.28 U				ξ.	ξ			56 C	ł	3	ξ	¥	Š	₹ :	¥	₹ ;	3	11/29/2000	8-10	WW-0
*	₹	3		₹	ξ	₹	ξ	ž	\$	3		Z :	₹	₹	×	3	3		Z ;	Z	¥	ž	Ā	0.59 U	0.59 U									0.59 U				ž	ž	0.59 U		3		3 3	*	Š	ž			0.004		7/23/20	_	2
×	₹	3		₹	₹	ž	ž	ž	ž	3	ž ;	Z	¥	₹	ž	3		- ·	Z ;	2	₹	Š	¥	NA	ž	ž	Ž	3	3	3	2	3	3	¥	×	ž	₹	ž	7	ž	ž	₹ :	2	3 3	ž	Ä	ž	₹	Z	Z :	Z Z	7/23/2003	0-2	
\$	ξ	3		₹	₹	₹	ξ	ξ	3	3		F	\$	₹	ξ	3	. š	- ·		ξ :	₹	₹	₹	₹	₹	3	3	3	3	. 3	3		3	₹	₹	₹	₹	ξ	₹	₹	\$	₹ :	Z.	3	₹	₹	ž	₹.	¥	₹ 5	Z 3	7/23/2003	6.0	P-11

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Mariborough, MA

					100	1 1 1 1 1 1 1	C-MAYA	-	ž	MW-3	≤	MW4	ç.WY	2	-6	
Analysis	Analyte	MCP	ethod 1	Sample Location	M		1		ı			1	•	7	67	8
				Deoth (feet)	9-7	8-10	6.2	10-12	9	9-10 0-10	2	5.75	21-0	ζ	3	200
		C WOL S	C 41/2/4/ 2	Date Semoled	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	11/29/2000	7/23/2003	7723/2003	1723/2003
	,	3-11O44-5	2					ן !	1	į	ΨN	ΑN	ΑN	٧×	¥	¥
HOL		900	8		¥	ΑN	ž	¥	Z.	Š	4					1
		ļ	Ĺ		ž	ž	¥	AN	ΝA	¥	NA	¥.	¥	¥	¥	ž
PCB Arociors		١	,			270	<u> </u>	8.5	٩	4	12	9.4	9.6	9.6	¥ X	¥
Metals	Arsenic	3	3		3		: ;	7	340	٤	9	8	۶	±	ž	¥
(mg/kg)	Barium	1,000	1,000		200					-	- 2	. 890	0.68	0.038 U	ž	≨
	Cadmium	8	90		0.77	0.7 U	0.69	9.0					, ×		ž	ž
	Chromium	1,000	1,000		ន	\$	22	×	E	8	5 :	3 ;	2 ;		-	
		300	9		\$	5	22	7.	38	8.7	=	4.6	9.0	7 707	•	9.7
		3 8	} 6		35.0	0.035	0.24	0.028 U	0.031 U	0.031 U	0.027 U	0.028 U	0.03 C	44.0	≨	ž
	Mercury	₹	3		} :		<u> </u>		1	¥N	¥2	Ą	ş	¥	ž	ž
	Nickel	300	8		Š	ź	§	: :		:		;	=	0.49	2	ž
	Selenium	400	904		=	-	- -	- -		=		- :	: :	2 6		4
_	i	100	ē		2.1 U	7	1.9	1.8 ∪	1.9	2	2	0 6.1	o 6'.	7.5	ž	<u> </u>
	S A S A S A S A S A S A S A S A S A S A	3			4	ΨN	ΑN	Ą	¥	≨	ž	ž	ž	ž	ž	≨
	Thallium	• ;	• !		{ ;	1	. <u>.</u>	- Z	47	ž	¥	ş	¥	¥	ž	ž
	Vanadium	004	9		£ 5	£ 5	§ <u>\$</u>	. 4	ď	ž	¥	ž	ž	¥	¥	¥
	Zinc	2,500	2,500		٤	£ .			5	1	Ϋ́Z	ΨN	¥	ž	Ϋ́	ž
TCLP and RCRA	TCLP lead (ug/L)	NS	SS		Ą	¥.	ž	ž	5	<u> </u>		1	₹Z	ΨN	ΑN	ž
Chambalta	Populatilly (*B	NS	SN		ž	¥	ž	¥	ΝA	ž	ž	٤	5			
		٩	92		ΨN	ΨN	ΑN	WAN	AN	ž	¥	¥	¥	¥	¥	≨
	pH (s.u.)	٤	2			44	4N	ž	Ą	ž	ž	٨×	ΑN	ν	ΝA	ž
	Reactive Suffide (mg/kg)	SS	ž		٤	4		1	ΨN	ΑN	ž	ž	¥	ΑN	¥	¥
	Reactive Cyanide (mg/kg)	SZ	SS		¥	Y.	Š	\$								

Motes:
At unit mg/kg unless otherwise specified.

Mg/kg - miligrams per kidogam (dry weight) or parts per milion (ppm).

NS - No samatants exist for this compound.

- Natural per milion (ppm).

NS - No samatants exist for this compound.

- Soil containing coal ashtwood ash.

(1) - No fash at 140/F.

NA - Not analyzed for the listed analyte.

ND - None detected; quantitation limits below listed MCP orteria.

SVOCs - Semi-outitie Organic Compounds.

PCB - Polychhornated Biphenyl.

F - degrees Farenhel.

VoCa - Volasite Organic Compounds.

U - Compound was not detected at specified quantitation limit.

VOCa - Volasite Organic Compounds.

Upt - Total betwoleum hydrocarbons.

ugh - micrograms per liter.

3.u - standard units.

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Marlborough, MA

																				(mg/kg)	SVOCs														***		-		(Burken)	(morka)		(mg/kg)	HAN						(mg/kg)	VOC.		Analysis	
Carbazole	Barrola Boardana	Dibenzo(a hlanthracene	Indeno(1,2,3-cd)pyrene	Benzo(a)pyrene	Benzo(k)fluoranthene	Benzo(b)fluoranthene	bia(2-Ethylhexyl)phthalate	Chrysene	Benzo(s)anthracene	Tylera	0	Fluoranthene	Anthracene	Phenanthrene	Fluorene	Dibenzofuran	Acenaphthene	Acenaphthylene	2-Methylnaphthalene	Naphthalene	4-Methylphenol	Senzo(gni)peryrana	Diberzo(a,n)anuracere	Indeno(12,3-cu)pyraina	Benzo(a)pyrene	Delizo(k)Rooseminono	Denzo(Minoranthene	Chrysene	Benzo(a)anutracerie	Pyrene	Fluoranthene	Anthracene	Phenanthrene	Fluorene	Acenaphthene	Acenaphthylene	2-Methymaphthalene	Naphthalene	C11 - C22 Aromatics	C19 - C36 Aliphatics	CO C40 Allohabo	C9 - C1Z Ailphatics	C9 - C10 Aromatics	Xylene (Total)	m,p-Xylene	Chioroform	2-Butanone	Methylene Chloride	Acetone	Trichlorofluoromethane	-	Analyte	
Z.	1.000	0.7	0.7	0.7	7		2 8	<u> </u>	4 5	7	700	1,000	1,000	1,000	1.000	Z	1,000	é	8	8 8	3 8	No.	1 200	0.7	0, 5	0.7	7	0.7	, !	2 6	1,000	1,000	1,000	1.000	1,000	100	500	ő	800	2,500	1000	100	ŝ	3 6	500	ő	6	100	8	-	S-1/GW-2	MCF MB000	
NS	1,000	0.7	0.7			. 5	3 6	· ·	7 5	7	700	1,000	1,000	8	1,000	2	1,00	Ē	8 8	ŝē	ŝ	5		9.7	0,7	0.7	7	0.7	7	0 2	3 6	1.00	į	1,000	1,000	i	500	8	800	2,500	1.000	8 8	ŝ	ŝ	× 8	200	8 8	é	6	SN	S-1/GW-3	- 20	
							•																																												Date Sampled	Dapth (feet)	noder calcar
N _A	₹	¥	3	. 5		Z :	Z :	₹ :	¥	₹	₹	ž	\$	3	5	5	3	¥ ;	Z	ξ:	₹ .	š	0.56 U	0.56 U	0.56 U	0.56 U				0.56			0.56				₹		9.5 U	ž	٥	×	₹ :	š	₹ ;	\$ 3	3	3	\$	\$	7/23/2003	၀ ၁	B-12
₹	ξ	ž	3	5	2 3	2	\$	<u>-</u>	₹	ž	ž	ž	ž	- 3	3	Z ;	2 3	Z		š	ž	Ä	Z	ž	ž	₹	ž	š	ž	₹	Z >	₹ :	₹ :	2 3	2 2	Ž	. ₹	ž	Ž	Š	Ā	NA	₹ :	ş	₹ 5	\$ 3	ž 3	2	3	\$	7/23/2003	24	B-12
₹	ž	3	3	Z :	Z :	₹	₹	\$	₹	Š	₹	3	3		¥ 3	Z	£ :	\$	₹	₹	₹	¥	¥	ž	₹	ž	₹	ž	ž	š	ξ	₹	₹ :	ž :	Z 3	3	\$	3	Š	ž	₹	¥	₹	Š	₹ :	₹ 3	₹ 3	3	\$ }	₹	7/23/2003	2	φ
₹		3		<u>z</u>	ž	₹	ž	ž	ž	ž	3	¥		2	¥ :	¥	₹	×	š	₹	₹	N.	NA	ž	₹	š	ž	ž	š	₹	ž	¥	Š	¥	₹ :	3	Z Z	3	3	₹	3	¥	¥	Ā	ž	₹ :	₹ 3	¥ 5	¥ 3	; ;	7/23/2003	2.4	B-13
3	3	. 3	2	₹	₹	₹	₹	ž	ž	ž		. 3	-	Z	Z	š	<u> </u>	₹	₹	₹	ž	\$	0.611	0.611	0.611	0.611	0.611	0.611	0.611		0.611 U	0.78) R11	Z 3				7.7	₹	ž	¥	NA	¥	ξ.	₹ 3	₹ 3	\$ \$	7/23/2003	3-Jan	B-14
3	3	= 3		š	₹	₹	\$	ξ	3	3	-	. 3	£ ;	₹	₹	₹	¥	ξ	₹	₹	₹	₹	0.57	0.57	0.57	0.57	0.57	_	_	_	0.57 U	0.57 U	0.57	_		0.57	₹ ₹	2 5	2 2			₹	ξ	₹	×	ξ	\$	₹ :	₹ :	£ 3	7/23/2003	5-7	8-15
3	5			₹	3	×	\$	₹	₹	3	- 3	¥ 3	Ž	¥.	3	₹	₹	ž	ξ	ž	*	₹	0.58		0.58				0.58	0.58	0.58 U	0.58 U	0.58 U	0.58 U		0.56	₹ ₹	2 8	_	6 N		ž	2	ž	Š	₹	₹	ž	Z :	₹ ₹	1/24/2003	5-Mar	B-16
5	3	<u> </u>	×	ž	₹	3	ξ	ž	ž	3	5	2	<u> </u>	š	ξ	ξ	š	ž	₹	3	\$	ž	ľ	0.50	0.59	0.00	0.00	0.59	0.59	0.59	0.59	0.59	_	0.59	_	0.59	ž :	ξ :	•	8 =	-	ž	ž	š	ž	ž		0.003 U		0.007	0.009	8-Jun	B-17
	₹ :	₹	₹	ž	¥	₹	3	3	3	5	ξ :	F	₹	₹	₹	₹	ž	¥	₹	₹	3	3	u.55	0.50	0.50		2 5	9 0	9 9	0.55	0.55	0.55	0.55	0.55		0.55	ξ	₹	_	=	: :	3	₹	*	×	₹	₹		0.004 U		10.01	_	_
	Z.	<u> </u>	₹	₹	ž	3	3	. 3	: 3	-	ξ.	<u>-</u> -	₹	ξ	ž	*	ž	NA	3	3	3	3	, ,	3 6	0.02	3 8	3 6	3 8	3 6	3 8	0.62	0.62	0.62	0.62	0.62 U	0.62	ž		0.62	= :	2 !	3 5	3	3	Z	ž	ž	ž	ξ	Š	ž	7-May	B-19
-	¥	ξ.	ž	ξ.	3	3	3	: 3			<u> </u>	ž	<u>~</u>	š	ž	×	×	3	3		3	3	NA S	3 6	_	5	0.56	5 6	2 2	0,50	0.50	0.56	0.56	0.56		0.56	¥	ž	0.56 U	± :	£ ;	3 5		3	ξ	ž	×	3	ž	ž	ž	7/25/2003	B-20
	₹	š	×	₹	3	3			¥ 3	<u> </u>	ξ	ž	ž	š	ž	3	3	. 3	. 3	3	. 3	¥ 5	t	1			2.5	٦	Γ	1	3.0			5	0.6	_	₹	₹		8 1	22 :	+	2 3	- 3	Z	ξ.	3	Š	₹	ž	1	7/25/2003	

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Martborough, MA

									,,,	97.0	1 18	D-17	B.18	B-19	B-20	7-9
Similar	Andrea	MCP Met	t pod	Sample Location	8-12	B-12	6-13	5	-	2	2	:	:			,
Aidiyala				Cand) (feat)	3	7,	0.2	2-4	3-Jan	5-7	5-Mar	578	7-May	7-May	37	?
		ŀ		Capar (sear)	2000	-	2000000	200000	2173770113	1030003	7/24/2003	7/24/2003	7/24/2003	7/24/2003	7/25/2003	1/25/2003
		S-1/GW-2	S-1/GW-3	Date Sampled	7/23/2003	1723/2003	1723/2003	1123/2003	112342000	200					***	1
1744		og C	900		AN.	ΥN	ž	ž	Ą	¥	₹	Ϋ́	¥	ž	ź	٤
171			,		ΨN.	ΔN	ΨŽ	ž	ΨŽ	ΨN	¥	¥	¥	NA	ΝA	NA
PCB Aroclars		ì	1		5				ļ.	ļ	4	42	8.3	7.8	9.3	9
Metals	Arsenic	8	8		¥	ž	ź	ž	3	•	}					420
	1100	80	1000		¥	ž	ž	ž	128	68.3	\$	¥ Z	77	9.0		3
(mg/kg)		3			4N	Ą	₹N	Y.	0.043 U	0.035 U	0.033 U	ź	0.21	0.042 U	0.037	0.036 U
	Cadmium	9	9		£ :	: :	1	47	18.	19.3	19.8	¥	16.6	22.4	19.6	24.4
	Chromium	1,000	000,		ž	ξ.	٠			-	17.7	a		10.2	6.3	72.5
	Lead	8	8		74.5	9.6	7 7	2	2	9		, ;			11	0.058
		,	2		ž	ž	¥	¥	0.064	0.018	0.17	ž	0.015	210.0	2	9,00
	Mercury	3 5	1 8		414	2	Ą	Ą.	¥	¥	¥	¥	ş	₹ Ž	ž	ž
	ZCK	ş	3		£ :	£ ;			-	118	11 070	Ą	1.4	0.54 C	0.47	0.46 ∪
	Selenium	ş	8		¥	ş	ş	Š	9		;			-	• •	1,
	1	90	8		¥	ž	ž	¥	-	-	-	ž	2	,	3	! ;
	DAID (47	42	Ą	ž	ž	ž	¥	¥	ž	ž	¥Z	Š.
	Thallium	٠ ;	• {		1	1	44	4	42	2	ž	ž	ž	ž	¥	ž
	Vanadium	007	900		<u> </u>	£ ±	<u>ا</u>	. 4	¥	¥	ž	¥	ž	¥	¥	Ą
	Zinc	2,500	2,500		Š	<u> </u>				1	ΨN	42	ΨŽ	ΑN	ž	ΑN
TCLP and RCRA	TCLP lead (ug/L)	SS	SN		¥	ž	ž	ž	ź				517	1	٩Z	ĄV
Chambaladan	Conjustifier (*6)	SX	NS.		ž	¥	¥	¥	¥	¥	¥	٤	5	5		
Characteriance	in the second of	917	NA.		42	ž	ž	ΑN	¥	¥	A	¥	¥	¥	¥	Š
	pH (s.u.)	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֓֓֓֓֓	2			1	42	42	4V	ž	¥	¥	¥	¥	NA	¥
	Reactive Sulfide (mg/kg)	S	2		٤	5 5	4	972	4 Z	¥	¥	¥	ž	Ą	ΥN	ΑN
	Reactive Cyanide (mg/kg)	SS	SN		NA NA	ž	Š									

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Mariborough, MA

Analysis	VOC.	(ma/ka)	(Parfier)					144/	morko)	(Ben (Bun)	BL	(molto)	(Barin)																			SVOC.	(marka)	•																		
Maike	Trichlorofluoromethane	Acetone	Methylene Chloride	2-Butanone	Chloroform	m,p-Xylene	Xylene (Total)	C9 - C10 Aromatics	C9 - C12 Aliphatics	Naphthalene	C9 - C18 Aliphatics	C19 - C36 Aliphatics	C11 - C22 Aromatica	C11 - CZZ Atomatica	Naphthalene	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	Benzo(ghi)perylene	4-Methylphenol	Naphthalone	2-Methyfnaphthalene	Acenaphthylene	Acensonthene	Dibenzofuran	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	bis(2-Ethylhexyl)phthalate	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	Cartoroda
S-1/GW-2	ઢ	, 8	100	å	ō	500	NS	100	1,000	100	1,000	2,500	80	ŝ	100	500	6	1,000	1,000	1,000	1.000	1,000	700	0.7	7	0.7	7	0.7	0.7	0.7	1.000	SN	1 00	500	100	000	NS.	1,000	1.000	1,000	1,000	700	0.7	7	NS	0.7	7	0.7	0.7	0.7	1,000	
GW-2 S-1/GW-3		80	ġ	6	200	500	NS	100	1,000	100	1,000	2,500	80	3 8	Ē	50	é	1.000	1,000	8	1,000	1,000	700	0.7	7	0.7	7	0.7	0.7	0.7	1,000	SN	8	500	é	1,000	S	1,000	ē	1,000	1,000	700	0.7	7	NS.	0.7	7	0.7	0.7	0.7	1,000	,
Depth (feet)																																																				
5-7 7/25/2003	┪	ξ	¥	ž	ž	Š	Z.	NA.	ž	₹	ĭ	24	t	0.58		\$	\$	0.58 U	0.58 U	ī	0.58 U	ĭ	1	0.58 U	0.58 U	0.58			0.58		0.58 U	ξ	ž	¥	₹	Š	₹	ž	š	ž	ž	¥	ž	ž	*	¥	ξ	ž	ž	ž	3	
4-6 7/25/2003	¥	¥	Š	Š	\$	ž	Š	ž	ž	Š	24	29	23	0.56 U		3	×	0.56 U	0.56 U	0.56	0.56 U		0.56	0.56		0.56	0.58	0.56 U	0.56	0.58	0.56	₹	₹	₹	×	Š	š	Š	ž	ž	ž	×	ž	3	ž	ž	3	ş	3	3	3	
6-8 7/25/2003	₹	\$	₹	₹	₹	₹	Š	₹	\$	₹	25	32	5	0.55 U		. 3	3	0.55	0.55										0.55		0.55	3	\$	\$	₹	₹	₹	₹	₹	₹	3	₹	ξ	3	₹	ž	3	3	3	3	3	
7-9 7/28/2003	A.	Š	¥	ž	₹	\$	ž	*	3	Š	25	*	=	0.51 U		3	\$	0.51	0.51		0.51				0.51			0.51	0.51	0.51	10.0	\$	š	3	ž	ž	₹	3	ž	ž	¥	3	Ş		3	\$	3	3	2		3	
7-May 7/28/2003	1		0.002 J		₹	\$	₹	\$	Ş	Ş	5	22	ī	0.51 U		3	3								0.51	99		2 2	0.51	0.51	0.01	3	3	3	š	\$	*	3	Š	3	3	3	3	3	3	- ₹	. ₹	3	3	: 3	\$ 5	
5-Mar 7/22/2003	×	3	¥	3	\$	\$	₹	. ₹	3	ž	9.6		9.4	0.55 U		¥ 3	3	0.55	0.55	0.55	0.56	0.55	0.00	0.30	0.00	0.50		0.50	0.50	0.00	0.50	3	3	3	3	ξ	. ₹	- 3	. ₹	: 3	: 3		<u> </u>	3	3	3		3	3	3	¥ ;	
7/23/2003			0.003		. ₹	3	3	3	3	, ₹	7	2	1	0.58 U		Z ;			0.58		0.58				0.00	950				2.50	П	3	3	3	3	3	3	3	; ;	3	3	. 3	<u> </u>	 5		. 3		5	5	5	₹ :	
5-Mar 7/22/2003	. ₹	3	₹	3	. <u> </u>	3	3	3	3	ž	N	246	8	3	\$	₹ :	•		0.62		20.02	: :	2 0		3.0	1			2 5	3	ž,	¥ 3	. 3	3	3	3	3	- ·	3	3	F 5	3	3	\$ 3	¥ 3	3	3	¥ 3		Z ;	Ž.	
4-Feb 4/20/2005	₹ ₹			2 2	3	£ §	3	3	\$ 3	3	ž	. ₹	3	₹	₹	ξ.	ž ;	3	3	3	3	Z 3	Z 3	<u>.</u>	Z 5	¥ 5	2	2 3	3	£ 3	\$	£ 3	- ·	3	5		3 3	¥ 3	¥ §	2 3	¥ 5	\$ 3		¥ 3	¥ 3	Z 3	-	¥ ;	¥ ;	ξ;	\$	
6-7.5 4/20/2005		3	. ₹	3	2 2	Z 3	3	3	2 3	3 3	3	. ₹	3	₹	š	š	Z :	5	3	3	3	2 3	₹ 3	2 3	Z S	¥ ;	Z	2 3	¥ 3	¥ 3	š		5 5	¥ 5	. 3	3	2 3	2	¥ 3	₹ 5	¥ :	2 5	\$ 3	¥ 3	Z ;	Z 5	Z :	ξ :	ž ;	₹ :	ξ	
10-Aug 4/20/2005		. ·	: ₹	3	2 3	Z ;	3	3	2 3	3	3		3	Z	₹	ž	₹	¥ 3	\$ 3	2	Z 3	Z ;	₹ :	2	ž	₹ :	₹	Ζ :	₹ 3	₹ :	ž	ξ :	Z ;	Z ;	5	5 5	Z 3	Z :	Z 3	₹ :	Z :	Z 5	Z 5	Z ;	Σ :	2 3	Z :	Z	₹ :	Z	ž	
10-Aug 4/20/2005	\$ \$: 3	Z 3	\$ 3	\$:	3	₹ ₹	Z ;	3	5	3 3	3	₹	₹	₹	₹	- ·	¥ 3	Z :	Z ;	Z ;	₹ :	Z	\$	₹ :	₹	ž	₹ :	Z :	\$	₹ :	₹ :	š :		5 5	₹ 5	₹ :	₹ :	₹ :	₹ :	₹ 3	¥ :	₹ :	*	₹ :	₹	₹	3	₹	₹	

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Mariborough, MA

	Annahan	WILD NO	athod 1	Sample Location	8.22	B-23	B-24	B-25	8-27	FB-TB-63	FB-TP-04	10-11-10	50103		5	3
Analysis	Alialyte A			Const Const	,	97	5	7-9	7-May	5-Mar		5-Mar	4-Feb	6-7.5	10-Aug	10-Aug
		0,000,0	0 4000	Cabrillians Sampled	1050003	105/2003	7/25/2003	7/28/2003	7/28/2003	7/22/2003	7/23/2003	7/22/2003	4/20/2005	4/20/2005	4/20/2005	4/20/2005
		5-M5M-5	3-1/GW-3	Date Seminar				417	42	ΨN	¥	ΨŽ	ž	٧×	¥	¥
Н		8	8		AN	¥	Y.	Ų.	4					ļ	į	ΨN
DCR Aroclore		2	2		Ą	ΑN	¥	¥	¥	ΨV	Ϋ́	ĕ	ž	ž	ž	5
and the second	America	۶	30		8.8	:	10.2	23.9	9.9	8.2	8.9	19.6	ž	¥	13.3	12.9
		8	5		205	Ą	¥	ž	86.5	84.1	539	225	¥	¥	≨	¥
(mg/kg)	Danua	3	3 6		11 2000	¥	Ą	¥	0.24	0.25 J	0.6	2,5	ź	¥	ş	≨
	Cadmium	, 6	9 6			4	Ž	¥.	9	4	32.8	46.4	ž	¥	≨	¥
	Chromium	90.	86.		1	4 N	Ą.	¥ Z	15.7	15.3	116	485	13.3	5.8	¥	¥,
	Lead	9	g 8		990	٠ <u>٠</u>	٩	¥.	0.039	0.00	0.23	95.0	¥	¥2	≨	¥
	Mercury	2	2 2		9 4	£ 5	2	4 2	4	Ž	ž	ž	ž	¥	¥	≨
	Nickel	8	300		ž	<u> </u>	٤:				-		¥.	¥	≨	Ϋ́
	Selenium	400	8		0.48	<u>د</u>	ź	Ę	7			! '	-	4	ΨM	¥2
	Silver	5	8		5.	ž	ž	¥	2.8	6.5	;	•	£ :	<u> </u>	·	
	Thefficial	•			¥	Ą	ž	¥	ž	ž	ž	¥ Z	≨	ď.	ž:	£ :
	Transfer of the second	40	907		ž	¥	ž	¥	¥	ž	¥	ž	≨	¥ Z	¥	≨ :
	Zion	2.500	2.500		ž	¥	¥.	¥	¥	Ϋ́	ΝA	NA	≨	¥	ž	ž
	2017	ڀِ	NA.		ΨN	ΨZ	ž	¥	ΑX	¥N	¥	ΨV	10 U	VΑ	¥.	ž
TCLP and KCKA	ICLF Read (Ug/L)	2 5			\$12	₹Z	ĄV	ΑN	¥	¥	¥	ΑN	¥	¥	ΝA	₹
Characteristics	Ignitability (*t)	ĝ	2		5		5	d la	ΨN	ΨN	¥	¥	≨	٧×	AN	ž
	pH (s.u.)	SN	SZ.		ž	ž	\$			44	MA	42	Ą	ΨŽ	ΨŽ	≨
	Reactive Sulfide (mg/kg)	SE	SN		Š	ž	ž	4	4			1	Š.	NA.	ΨN	Ą
	Reactive Cyanide (mg/kg)	SN	SN		٧V	Ϋ́	ΑN	ΨV	¥	ď.	Š	Š	Š			

Notes:

All unit in nightig unless otherwise specified.

Toging—unligerans per kilogram (dry weight) or parts per million (porm).

NS - No standands exist for this compound.

- Natural short of the second of the

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Mariborough, MA

VOCs Trichlorofluoromethane (mg/kg) Methylene Chloride 2-Butanone Methylene Chloride 2-Butanone Methylene Chloride 2-Butanone Methylene Chloride Chloroform m.p.Xylene (Total) VPH G3 - C10 Aromatics (C9 - C12 Alphatics C19 - C28 Alphatics C11 - C22 Aromatics Naphthalene 2-Methylanaphthelene Acenaphthylene Acenaphthylene Fluoreme Phenanthene Phenanthene Fluoreme Fluoreme Benzo(a)pyrene Benzo(a)pyrene Benzo(a)pyrene Benzo(a)pyrene Benzo(a)pyrene Benzo(a)pyrene Benzo(a)pyrene Benzo(a)phanthracene Chysene Benzo(a)phanthracene Fluoreme Phenanthrene Benzo(a)phanthracene Benzo(a)phanthracene Benzo(a)phanthracene Fluoreme Phenanthrene Benzo(a)phylanylphatiene Acenaphthylene Acenaphthylene Acenaphthylene Acenaphthylene Benzo(a)pyrene	S-1/GW-3 NS 80 100 40 200 500 NS 100 100 1,000	Depth (set) Date Sampled	6-Apr 423/2006 0.004 00 0.0012 0 0.0004	6-Apr 42072005 0.0014 U 0.0014 U 0.0004 U 0.00004 U 0.0004 U 0.0004 U 0.0004 U 0.0004 U 0.0004 U 0.0004 U 0.000	4.7-Abay 4.7	7-May 470/2005	4,20,2005 0,	7-May 4202005 NA N		47000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
지 및 명 명 명 당 다 다 된 구 구 구 구 구 구 구 구 구 구 구 구 구 구 구 구 구	NS N		0.004 U U 0.004 U U 0.004 U U U U U U U U U U U U U U U U U U	0.004 C C C C C C C C C C C C C C C C C C	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	*		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	**
T B B B B C C B P P P P D A A 24 4 4 5 8 D D R B B C C B P P P A P P P C A 24 8 C C C C C C C C C C C C C C C C C C	80 40 500 800 NS NS NS NS NS NS NS NS NS NS NS NS NS				\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		*			0.004 0.004 0.004 0.004 0.004 9E-04 NA NA NA
	40 200 200 NS 100 100 100 100 2,500 800 100 100 100 100 100 100 100 100 1				\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		*			## c e c
	40 500 500 100 1,0				\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		*			## c e
	200 800 NS 1,000 100 1,000 100 2,500 800 800 100 100 100 1,0				\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		* * * * * * * * * * * * * * * * * * * *			
T B B B E C B P P P P P P P A A 24 4 4 5 8 2 2 7 8 8 8 9 C 8 9 P P A A 24 6 C C C 6 8 6 8 6 C 8 9 P P A A 24 6 C C C 6 8 6 6 C 8 9 P P A A 24 6 C C C 6 8 6 C 8 9 P P A A 24 6 C C C 6 R C 6 C 8 9 P P A A 24 6 C C C 6 R C 6 C 8 9 P P A A 24 6 C C C 6 R C 6 C 8 9 P P A A 24 6 C C C 6 R C 6 C 8 9 P P A A 24 6 C C C 6 R C 6 C 8 9 P P A A 24 6 C C C 6 R C 6 C 8 P P P A A 24 6 C C C 6 R C 6 C 8 P P P A A 24 6 C C C 6 R C 6 C 8 P P P A A 24 6 C C C C 6 R C 6 C C C 6 C C C 6 C C C 6 C C C 6 C C C C 6 C C C C C 6 C C C C C 6 C	NS 1000 11,000 12,500 22,500 100 100 100 100 100 100 100 100 100				\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5					
	NS 1000 1000 1000 1000 1000 2,500 800 100 100 100 100 100 100 100 100 1				\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5					
CG CG RES	1,000 1,000 1,000 2,500 800 100 100 100 100 100 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				
T B B B E C B P P P P P P A A 22 K 4 1 B B E R C B B C B C B	1,000 1,000 2,500 800 100 500 100 100 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				
T B B B B C C B D T T A T T T D C A A 22 X 4.1 B C R B B B C C B D T T A 3 T T T D C A A 22 X 4.1 B C R B B B C C B D T T A 3 T T T T D C A A 22 X 4.1 B C R B B B C C B D T T A 3 T T T T D C A A 22 X 4.1 B C R B B B C C B D T T A 3 T T T T D C A A 22 X 4.1 B C R B B B C C B D T T A 3 T T T T D C A A 22 X 4.1 B C R B C R B B C C B D T T A 3 T T T T D C A A 22 X 4.1 B C R B B C C B D T T A 3 T T T T D C A A 22 X 4.1 B C R B B C C B D T T A 3 T T T T D C A A 22 X 4.1 B C R B C R B C C B D T T A 3 T T T T D C A A 22 X 4.1 B C R B C R B C C B D T T T A 3 T T T T D C A A 22 X 4.1 B C R B C R B C C B D T T T A 3 T T T T T D C A A 22 X 4.1 B C R B C R B C C B D T T T A 3 T T T T T D C A A 22 X 4.1 B C R B C R B C C B D T T T A 3 T T T T T T D C A A 22 X 4.1 B C R B C R B C C B D T T T A 3 T T T T T T T T T T T T T T T	1,000 2,500 800 100 100 1,000 1,000 1,000 1,000 1,000 1,000 1,000 700 0,7		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		* * * * * * * * * * * * * * * * *	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	* * * * * * * * * * * * * * * * * * * *			
T B B B B B C B D P F A P F D A A 22 44 1 B B D R R B B C C B P F A A P F D A A 22 44 1 B B D R R B B C C B B C C B B C C B B C C B B C C B C C B C C B C C B C C B C C B C C C B C C C B C C C C B C	1,000 800 100 100 100 100 100 1,000 1,000 1,000 1,000 1,000 1,000 700 0,7		* * * * * * * * * * * * * * * * * *	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	* * * * * * * * * * * * * * * * *	3 	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	* * * * * * * * * * * * * * * * * * *			
T B B B B C C B J T A T T T D A A 22 & 4.1 B C R R B B B C C B J F A T T F A 6 6.2 N G C C C	2,500 800 100 500 100 1,000 1,000 1,000 1,000 700 700 0,7		* * * * * * * * * * * * *		* * * * * * * * * * * * * * *	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5	* * * * * * * * * * * * * * * * *			
C1 R R R R R R R R R R R R R R R R R R R	800 100 100 100 1,000 1,000 1,000 1,000 700 0.7		* * * * * * * * * * * *		* * * * * * * * * * * * *	3 	5	* * * * * * * * * * * * * * * * *			_
	100 500 100 1,000 1,000 1,000 1,000 700 0.7		* * * * * * * * * * *	* * * * * * * * * * * *	* * * * * * * * * * * *	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5	* * * * * * * * * * * * * * * *			_
3 B B B B C B J F A 7 F F B B B B B C B J F A 7 F B C A 2 4 4 4 5 B B B B C B J F A 7 F B C A 2 4 4 5 B B B B C B J F A 7 F B C A 2 4 4 5 B B B B C B J F A 7 F B C A 2 4 4 5 B B B B C B J F A 7 F B C A 2 4 4 5 B B B B C B J F A 7 F B C A 2 4 4 5 B B B B C B J F A 7 F B C A 2 4 4 5 B B B C B J F A 7 F B C A 2 4 4 5 B B B C B J F A 7 F B C A 2 4 4 5 B B B C B J F A 7 F B C A 2 4 4 5 B B C B C B J F A 7 F B C A 2 4 4 5 B B C B C B J F A 7 F B C A 2 4 4 5 B B C B C B J F A 7 F B C A 2 4 4 5 B B C B C B J F A 3 7 F B C A 2 4 4 5 B B C B C B J F A 3 7 F B C A 2 4 4 5 B B C B C B J F A 3 7 F B C A 2 4 4 5 B B C B C B C B J F A 3 7 F B C A 2 4 4 5 B B C B C B C B C B C B C B C B C B C	500 1,000 1,000 1,000 1,000 1,000 1,000 700 0,7		£ £ £ £ £ £ £ £ £ £	* * * * * * * * * *	* * * * * * * * * *	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5	* * * * * * * * * * * * *			
	1,000 1,000 1,000 1,000 1,000 1,000 700 0,7		* * * * * * * * *	* * * * * * * * * *	* * * * * * * * *	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5 5 5 5 5 5 5 5 5 5 5 5 5	* * * * * * * * * * * * * * * * * * * *			
	1,000 1,000 1,000 1,000 1,000 700 0,7		* * * * * * * *	2 2 2 2 2 2 2 2 2 2	* * * * * * * * *	3 	3 5 5 5 5 5 5 5 5 5 5 5 5	* * * * * * * * * * * * *			
	1,900 100 1,900 1,900 700 0.7		* * * * * * *	2 2 2 2 2 3 3	* * * * * * *	* * * * * * * * *	* * * * * * * * *	* * * * * * * * * * *			
	100 1,000 1,000 700 0.7		* * * * * *	3 3 3 3 3 3 3	* * * * * *	* * * * * * *	* * * * * * * * *	* * * * * * * * * *			
	1,000 1,000 700 0.7			2 3 3 3 3	* * * * * *	* * * * * *	* * * * * * * *	* * * * * * * * *			_
	1,000 700 0,7 0,7		\$ \$ \$ \$	2 3 3 3	* * * * *	* * * * *	* * * * * * *	* * * * * * *			
	0.7 0.7		\$ \$ \$	* * * *	* * * *	* * * * *	* * * * * *	* * * * * *			
□ B B B B B C C B P F F P F D A A A 2 2 X 4.1 B B D 元 元 B B B B B B B B B B B B B B B	0,7 0,7		₹ ₹	*	\$ \$ \$	*	* * * * *	* * * * *			
	0, 7		š	₹ ₹	\$ \$	₹ ₹ ₹	3	* * * *			
	0.7			Z 	\$	₹ ₹	¥	3 3 3			
R			š	Š		₹	ž ž	3 §			
	7		₹	3	₹	•	3	3	ļ		
	0.7		\$	\$	\$	3	:				
	0.7		ž	\$	3	3	3	3	_		
	0.7		Š	*	₹	3	₹ ₹	3	L		-
	1,000		Ž	NA	ş	3	3	3	•		
	S		0.045 J	0.39	\$	Ş	0.36	3	:		
2-Methylnaphthisine Accenaphthylere Accenaphthylere Disenzofuran Fluorene Phenanthene Anthracene Fluoranthene Berizo(e)anthracene Berizo(e)fluoranthene Berizo(e)fluoranthene Berizo(e)fluoranthene Berizo(e)fluoranthene Berizo(e)fluoranthene Berizo(e)fluoranthene Berizo(e)fluoranthene	8		0.24 J	0.25 J	0.004	3	0.36	0.004			
Acenaphthylene Acenaphthylene Acenaphthylene Disenzofuran Fluorene Phenanthrene Anthracene Fluoranthene Benzof(a)anthracene Dis(2-Ethyleney)phthalale Benzof(b)fluoranthene Benzof(b)fluoranthene Benzof(b)fluoranthene Benzof(b)fluoranthene Benzof(b)fluoranthene	500		0.15	0.11	0.004	3	0.36	0.004			
Acanaphthere Dibenzofuran Fluorene Phenanthrene Anthracene Fluoranthrene Pyrene Benzo(e)anthracene Chrysene bid(2-Ehryheay)johthalale Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene	É		0.30			3		2 5	: 0	•	:
Phoenzouran Fluorens Phenanthrene Anthracene Fluoranthene Authracene Fluoranthene Pyrene Berrzo(e) jinoranthene	1,00				9.00	3	2 6		•	2 4	
Phonenthene Anthracene Fluoranthene Anthracene Fluoranthene Pyrane Benzo(e)anthracene bis(2-Eryheav)phthatale Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene	Z		; 5		3	3		3	:	-	:
Anthracene Fluoranthene Pyrane Perzo(ajanthracene Berzo(ajanthracene Chryane bis(2-Ethylhazy))phthalate Berzo(b)fluoranthene Berzo(k)fluoranthene Berzo(k)fluoranthene	1,000		3 5	0.29	0.004	. 3	2 5	2 0			
Anthracene Fluoranthene Pyratie Berrzo(e)anthracene Chrysene bis(2-Ehrheav)phthaiale Berrzo(b)fluoranthene Berrzo(b)fluoranthene Berrzo(b)fluoranthene Berrzo(b)fluoranthene	8		: 23	3.5	0.006	3	2 2	2 0	_	0.026	_
Fluoranthene Pyrane Benzo(s)anthracene Chrysene bis(2-Etryheav)phthalale Benzo(b)fluoranthene Benzo(d)fluoranthene Benzo(d)pyrane Indeno(1,2,3-cd)pyrane	1,000		2		0.004	3		Ş	_	5.020	
Pyrene Benze(s)anthrecene Chrysene bis(2-Etrylheayl)phthalate Benze(s)fluoranthene Benze(s)fluoranthene Benze(s)grene Indeno(1,2,3-cd)pyrene	000		25	5.2	0.022	. ₹		9.0		1073	
Berzo(a)anthracene Chrysene bis(2-Enylheay)jphthalate Berzo(b)fluoranthene Berzo(k)fluoranthene Berzo(k)fluoranthene Berzo(k)fluoranthene	700		Z		0.016	3	2.3	9		20//	
Chrysene bis(2-Enyhexy)phthalais bis(2-Enyhexy)phthalais Benzz(b)fluoranthene Benzz(b)fluoranthene Benzz(b)prene Indeno(1,2,3-c0)pyrene	0.7		42	1.7	0.000	3	0.36	0.007		5	·
bei(2-Enyheay)phthalale Beirzo(b)fluoranthene Berzo(b)fluoranthene Berzo(a)pyrene Indeno(1-2,3-cd)pyrene	7		53	2	0.013	3	0.36	0.007		0.036	
Berzo(b)fluoranthene Berzo(b)fluoranthene Berzo(b)pyrene Indeno(1.2.3-od)pyrene	S		0.15 J	0.087 J	3	3	0.36	3		3	
Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-od)pyrene	0.7		16	26	0.016	*	0.38	0.008		0.051	
Benzo(s)pyrene Indeno(1.2,3-cd)pyrene	7		3.0	1.2	0.006	Š	0.36 U	0.004	_		
Indeno(1.2,3-od)pyrene	0.7			19	0.005	ž	0.36 U	0.007		0.015	
	0.7		2.4	0.62	0.007	ξ	0.36 U	0.005	_	0.015	
Dibenzo(a,h)anthracene	0.7		0.56	0.14 J	0.004 U	₹	0.36 U	0.004		0.015 0.045 0.024	
Benzo(g,h,i)perylene	1,000		2.6	0.6	2 207	_ Z	320	905	c	0.015 0.045 0.024 0.004 U	c
Carbazole	NS.		ž		0.00.	5	0.30	-	c		c
		0.7 0.7 0.7 0.7 0.7 0.7 1.000 NS 100 100 100 100 100 100 100 100 100 10	1,000 1,000		NA N	NA N	NA N	NA N	0.046 J 0.39 U NA 0.36 U 0.24 J 0.25 J 0.004 U NA 0.36 U 0.15 J 0.11 J 0.004 U NA 0.36 U 0.88 0.27 J 0.004 U NA 0.36 U 1.1 0.29 J 0.004 U NA 0.36 U 1.1 0.29 J 0.004 U NA 0.36 U 2.2 0.34 0.004 U NA 0.36 U 2.5 5.2 0.004 U NA 0.36 U 2.5 5.2 0.005 U NA 0.36 U 2.7 0.006 U NA 0.36 U 2.8 0.007 U NA 0.36 U 2.9 0.007 U NA 0.36 U 2.0 0.008 U NA 0.36 U 3.8 0.007 U NA 0.36 U 0.008 NA 0.36 U	0.88 0.27 J 0.004 U NA 0.36 U 0.004 U 1.1 0.007 J 0.004 U NA 0.36 U 0.008 U 0.007 J 0.007 NA 0.36 U 0.008 U 0.007 NA 0.36 U 0.008 NA 0.3	NA N

Table 1 Summary of Soil Analytical Results 2000-2005 Former Frye Boot Site Martborough, MA

													ľ
		1 MCD Method 1	athod 1	Sample (ocation	B-106	B-106 DUP	B-107	B-107 DUP	8-108	B-109	B-110	1	_
Analysis	Antriyre			Charly Maret		R-Anc		7-May	6-Apr	7-May	4.5-6	8-Jun	_
			0	Copus (see.)	4000004	4/20/2005	4720/2005	4/20/2005	4/20/2005	4/20/2005	4/20/2005	4/20/2005	_
		S-1/GW-2	S-1/GW-2 S-1/GW-3	Daldiure airo	4/20/2000	2007					1	= 3	_
TOM		900	900		5	160	¥	NA	e e	¥	Š	3	T
		١	Ŷ		QN	QN	ΑN	¥	Q	ΑN	ΑA	QN	7
PCB Arecions		·					١	[.,	8.7	6.8	7.8	
Metals	Arsenic	8	8		9	Ę	;	;	! ;	;		***	-
(mothe)	E	1,000	1,000		90	¥	63.6	55.7	72.8	97.2		?	-
(848)	1111111	Ş	. 02		0.32 U	¥	5.6	1.6	0.31 U	0.31	0.3	0.33	-
	Cadming	3	5		717	ď.	22.6	16.8	22.2	7.7	18.2	70.4	-
	Chromium	3	30.			1	7.3	7.8	8.9	7.2	12.9	22.7	-
	Lead	8	900		*	Ę	!	:		:		9000	-
	Memory	20	70		0.057	Ą	0.034 U	0.035	0.035	0.033	5	0.030	-
	1	ç	Ç.		14.8	¥X	10.6	7,8	1.4	11.7	12.5	14.2	-
	NOVE	3 9	3 8		42	Ą	Ą	ź	ž	ş	≨	ž	
	Selenium	004	3 5			2		5.8	7.6	5.8	1.5 U	4.9	
	Silver	2	<u> </u>			5 3	:	: ;	17	5.	7.	1.8	_
	Thallium				9' 1	£ :	<u> </u>		: ;	, <u>x</u>	23.3	28.5	-
	Vanadium	9	6		27.6	ž	3	7.07		1		2	-
	Zinc	2,500	2,500		186	¥	72.6	8	3	\$			T
4000	TO Diend (mod)	Ϋ́	SN		53	AN	¥	NA	ΨN	٧×	ĕ	ž	T
SUC Sua KCKS	וכרו עשם (מנוד)	9	914		,	٩Z	ž	N.A.	۲۰	ž	¥	7	
Characteristics	Ignitability (*1)	2	2			1	472	ΨN	6.2	ΑN	ΥN	9.6	
	pH (s.u.)	SZ	SZ.			5	5			414	2	90 0	Г
	Describe Sulfide (moltin)	SZ	SZ		0.99	ž	¥	¥	D. 88. C	ž	4		T
	Company Company							***	- 000	٩V	¥2	950	

Notes:

All unit maying unless otherwise specified.

maying - militarises or kingram (ricy weight) or perts per million (ppm).

NS - No aend-sards exist for this compound.

* - Natural soid.

* - Soil containing onel saft/wood sah.

(1) - No feath at 140/F.

NA - Not analyzed for the listed analyte.

NA - Not analyzed for the listed analyte.

NO - Note detected; quantitation limits below listed MCP criteria.

SVICE - Semirivatile Organic Compounda.

PC - Registers Framholt.

You - Samirotalise Bipmoy.

U - Compound was not detected at specified quantitation limit.

VICE - Votatile Organic Compounds.

ITPH - Total Petroleum Hydrocarthoria.

ugl. - micrograms per liter.

3.1. - standard units.

EXHIBIT C

CITY OF MARLBOROUGH FRYE BOOT SITE

COMPREHENSIVE REDEVELOPMENT PLAN



Prepared for:

The City of Marlborough Planning Office 140 Main Street Marlborough, MA

June 2002

Job Number: 61008

Prepared by:



33 Waldo Street Worcester, MA 01608

City of Marlborough Frye Boot Site

Comprehensive Redevelopment Plan

Prepared For

City of Marlborough Planning Office 140 Main Street Marlborough, MA

William J. Mauro, Jr., Mayor

Alfred Lima, Planning Director

Citizen's Advisory Committee

Trish Pope Sandy Austin Kevin Gough Andrea Jackson Lynn Faust

Funded By

Commonwealth of Massachusetts Office of the Attorney General Municipal Brownfields Grant Program

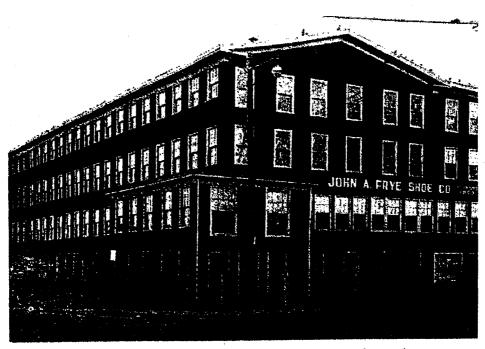
Prepared By

TerraSphere, Inc. 33 Waldo Street Worcester, MA 01608 508-792-4500

with
Brownfields Recovery Corp.
Boston, MA

June 2002

Ta	ble of Contents	
1.	Executive Summary	1
2.	Purpose of this Study	2
3.	Project Area Overview	4
	a. City of Marlborough	
	b. Frye Boot Site	
	c. Existing Conditions	
	d. Zoning	
	e. Circulation	
	f. Infrastructure	
4.	Proposed Reuse Plan	10
5	Construction Cost Estimates	16
6.	Remedial Strategy	20
7.	Liability Relief for the City of Marlborough	27
	Public Funding Sources for Brownfields Redevelopment	
	Attachments	



Later Frye Boot Building on the site (image from Marlborough Historical Society)

1. EXECUTIVE SUMMARY

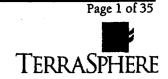
This report was prepared for the City of Marlborough in order to develop a redevelopment and remediation strategy for the Former Tannery Site, also known as the Frye Boot Site, located at the intersection of Pleasant and Chestnut Streets. Funding for this study was provided by The Massachusetts Attorney General's Office Municipal Brownfields Grant Program in order to better position the property for redevelopment.

The City of Marlborough is considering taking the site for back taxes because the site is currently vacant and the present owner cannot be located. Therefore, TerraSphere Inc. and its Sub Consultant Brownfields Recovery/ERI worked with the City and Citizens Advisory Committee to prepare a redevelopment plan for the site. Following a series of meetings, two residential redevelopment plans were prepared for the property. The first plan proposes an Affordable Assisted Living project with 91 units. The second plan proposes Affordable Senior Housing with 57 units. In both cases, the building would be three-story and parking would be provided beneath the building as well as on-site. Landscaped areas would be placed around the building for resident use.

Based on their review of previous site studies, Brownfields Recovery/ERI determined that the contamination found on the site would not prohibit residential use. Due to subsurface conditions, material will need to be removed in the area of building construction. At that time, any contaminated material could be properly disposed of. Other contaminated areas of the site could be capped or paved over. Parking was placed beneath the building to provide a cap and vented space between the remaining soil and residential building. In addition, further testing and a series of regulatory steps will need to be undertaken with the State Department of Environmental Protection prior to construction.

The estimated cost for site clean up is approximately \$750,000. Site and building construction is estimated at \$8,000,000.00.

The following report describes these proposed actions and recommendations in more detail.



2. PURPOSE OF THIS STUDY

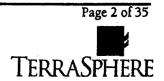
The City of Marlborough has engaged TerraSphere, Inc. and its Sub-Consultant Brownfields Recovery Corp., to produce this Comprehensive redevelopment Plan/Remediation report for the Old Tannery site (a.k.a. Frye Boot Factory) as part of a Municipal Brownfields Grant Program funded by the Massachusetts Attorney General's Office. The purpose if this project is to present both a reuse plan for the property supported by a remediation strategy tied to the recommended reuse.

As an overview, the City of Marlborough has experienced a tremendous amount of growth tied to the high technology industry in recent years. Much of this growth, and support services, has occurred on undeveloped land on the outskirts of the community and along Route 495. However, the City has an inventory of vacant or underutilized old industrial property close to its central business district that needs to be put back into use. The City wishes to put productive uses back on these sites and is undertaking steps to achieve that goal.

Beginning in November of 1999, the City received a Brownfields Demonstration Pilot Program grant from the US Environmental Protection Agency. Funds from this program were used to perform an initial site assessment, Phase I and Phase II reports for the Former Tannery site. These reports identified the need for further testing as well as reuse and redevelopment planning for the site. In response, the City applied for and received funding to complete this reuse and redevelopment plan for the Former Tannery site through the Attorney General's Municipal Brownfield Grant Program.

The City has identified this site as a key site for redevelopment for a number of reasons:

- The site has been vacant since 1989,
- In 1998, the City had to demolish the buildings on the site because the owner could not be located and the buildings posed a threat to public health.



 As a vacant property, the site has a detrimental effect on the surrounding neighborhood,

Since the current owner cannot be identified, the City plans to take the property for back taxes and take a lead in the redevelopment of this site.

As a result of this study, the City will have a conceptual plan for the reuse of the property based on community needs and market conditions. A remediation strategy will provide direction for the clean-up of the site to meet the program needs of the proposed use. Furthermore, this remediation strategy will enable the City to participate in the Massachusetts Office of the Attorney General's Brownfield Covenant Program.



Current Frye Boot site

3. PROJECT AREA OVERVIEW

A. The City of Marlborough

The City of Marlborough is a large community encompassing 22 square miles located in the "MetroWest" area of the Boston region. European immigrants first settled Marlborough in the 1650's. The community later prospered due to its location along the Boston Post Road. In the 1830's, Marlborough grew into a noted shoe-manufacturing city. At its industrial pinnacle in the 1860's, the city contained 17 shoe factories. In fact, the City seal contains images of a large shoe factory, a shoebox and a pair of boots.

Most of the shoe manufacturing industry left Marlborough by the 1930's, but has been replaced in recent years by a thriving base of high-technology and service companies. This is due to a number of reasons. First, Marlborough is located in the midst of what has become known as the "Silicon Valley of the East" which contains a number of high-tech companies along the Route 128 and Route 495 corridors. Second, Marlborough has experienced a dramatic change in its demographics and business base mainly due to its location on the interstate highway system. Route 495 is located in the western edge of Marlborough, providing access to Interstate Route 290, just a few miles to the north, and the Massachusetts Turnpike, located just 8 miles to the south. A cloverleaf ramp system provides full access to Marlborough from Route 495 at Route 20. From this point, Route 20 runs through the center of Marlborough from east to west, forming the central circulation spine of the City.

In addition, the City has an excellent wastewater treatment facility, public water supply and large open areas zoned for development. All these factors have combined to attract high technology companies of state, national and international significance to locate and expand in Marlborough. As a result, the City has experienced a growth in tax revenues due to a significant amount of commercial growth in recent years.



In addition to its strategic location near many of the state's major transportation links, Marlborough contains an appealing environment for residential life. The City has an ever-changing landscape with varied topography resulting in many steep sided hills. Large bodies of water are found throughout the City and include the Sudbury Reservoir, Fort Meadow Reservoir, Millham Reservoir, Hagar Pond and Williams Lake. There are also a number of small ponds and significant areas of wetlands. All these combine to make Marlborough an attractive place to live.



Period home in project area

Due in part to its easy access, proximity to jobs and picturesque setting, Marlborough has become an attractive place to live and work in recent years. Currently, the population of 36, 255 has an average annual wage that is higher than the statewide average. At the same time,

housing costs are also higher than the statewide average and continue to rise rapidly. In spite of these higher than average statistics, Marlborough remains a solidly middle class City.

As Marlborough continues to attract development, it makes sense for the City to try to entice developers to revitalize some of the community's older industrial sites and neighborhoods. Therefore, the city has taken steps to put some of its abandon "brownfield" sites back into productive use. The Former Tannery Site, also known as the Frye Boot Site, is one such site that is currently vacant but has a strategic location and role to play in the stabilization and redevelopment of the central business area.

B. The Former Tannery Site (a.k.a. Frye Boot Site)

The Former Tannery site is located on a key parcel within a neighborhood that serves a transition between the downtown commercial district and adjacent

Page 5 of 35
TERRASPHERE

residential neighborhoods. This 1.4-acre site was once the location of the Frye Shoe Manufacturing Company that operated in Marlborough for many years. The Frye Boot Company used the site as a tannery and production facility from 1863 to 1982. Other businesses then occupied some of the buildings until the site was finally abandoned in 1989.



Site context

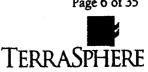
When used by the Frye Boot Company, the site contained a 5-story wood frame production facility, a two-story brick building that housed boilers and contained a smokestack, a 4-story wood frame tannery building, a storage shed, some onsite parking and sparse vegetation.



Current site conditions

After the site was abandoned, the City has used all possible means to try to locate the property owner in order to have the site cleaned and secured. However, they were unable to locate the owner. Therefore, the City took control of the property under public safety

MARLBOROUGH FORMER TANNERY SITE -COMPREHENSIVE REDEVELOPMENT PLAN **JUNE 2002**



Page 6 of 35

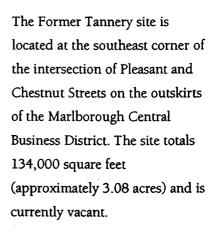
provisions to demolish the buildings and secure the site with fencing. In 1998 the buildings on the site were demolished due to their hazardous condition.



View of site looking up Pleasant Street

Currently, the property is in tax title and there are liens against the property associated with the demolition of the buildings by the City. The City is planning to take the property through the tax title process but is concerned with site contamination along with the clean-up costs and liability issues associated with such problems.

C. Existing Conditions





View of site looking up Chestnut Street

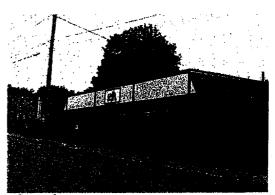
Current Condition

Currently, the site is vacant, covered with tall grass and surrounded by a chain link fence. This fence abuts the back of the sidewalks along Chestnut and Pleasant Streets, as well as the abutting residential and commercial properties, prohibiting access to the site. However, the fence is transparent, so the site is completely visible for the abutting streets and property.

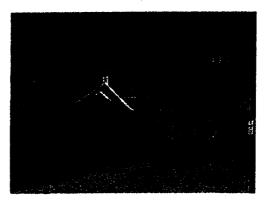
As viewed from the street, the site is fairly flat and slopes slightly to the southeast, resulting in a grade change of approximately eight feet from the intersection of Pleasant and Chestnut to the low point along the site's eastern boundary.



Abutting residential land use



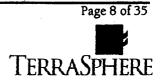
Lil' Peach convenience store



Fire Station

Adjacent Land Use

The area surrounding the site currently includes a mixture of uses. The neighborhoods to the north, west and east of the property are mostly residential, though other uses are mixed in. For example, a "Lil' Peach" convenience store is located directly across Chestnut Street to the north of the property. A fire station is located to the west, directly across Pleasant Street. One residential apartment building is located to the south of the site, along with some commercial businesses. Overall, the area contains a mixture of uses, so that any similar use would be compatible on this site.



Zoning

The site is located in a residential (RB) zoning district. This zone allows a variety of uses by right, including residential, schools, churches, recreation, and parks. Uses allowed by special permit include camps, hospitals, clinics, nursing homes, and animal hospitals.

Circulation

The site is serviced by city streets and with frontage on Chestnut and Pleasant Streets. Pleasant Street provides good access as it connects to Route 20 to the South. Chestnut Street is more of a side street providing local access. In addition, municipal bus service is provided along Pleasant Street.



Infrastructure

The site is serviced by municipal water, sewer and natural gas via underground lines in Chestnut Street to the north. Overhead electric and telephone lines service the site from along Pleasant Street. Therefore, the site has access to adequate utilities to support its redevelopment.

4. PROPOSED REUSE PLAN

Prior to beginning this study, the City of Marlborough had identified the Former Tannery site as a key redevelopment site, and suggestions were made for its reuse. These suggestions included:

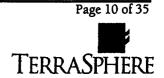
- An affordable assisted living facility,
- Affordable senior housing,
- Affordable housing for eligible families, and
- A public park.

In response to these recommendations, the Brownfields Recovery Corporation evaluated the Phase I and Phase II studies completed regarding site contamination issues to determine if it would be cost prohibitive to clean the site to accommodate any of these uses. Bownfields Recovery concluded that the clean-up costs would not be prohibitive. Though contamination does exist on the site, the site is also filled with a great deal of building debris. Since most of this building debris will need to be removed for the redevelopment of the site, then most of the contamination can be removed along with it at a minimal cost premium.

Based on this input from the Brownfields Recovery Corp., the City and the Citizen's Advisory Committee discussed various reuse options for the site, and asked TerraSphere to develop conceptual plans for three reuse options. These options included:

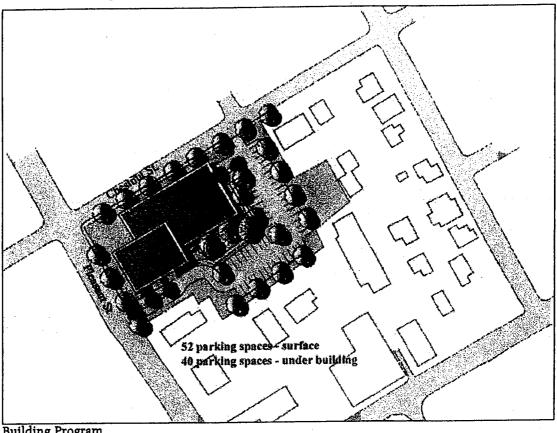
- An affordable assisted living facility,
- Affordable senior housing,
- A medical office building.

These recommendations were based on perceived need within the community. Currently, there is a waiting list for affordable senior housing, and the community expects an even greater demand in the future. Affordable assisted living is tied to this demand as elder citizens age and become less able to care for themselves. The suggestion of medical office space resulted from past interest shown by a developer who wanted to construct a medical office building on the



site. Therefore, TerraSphere prepared conceptual plans for these options, as presented below.

Medical Office Option



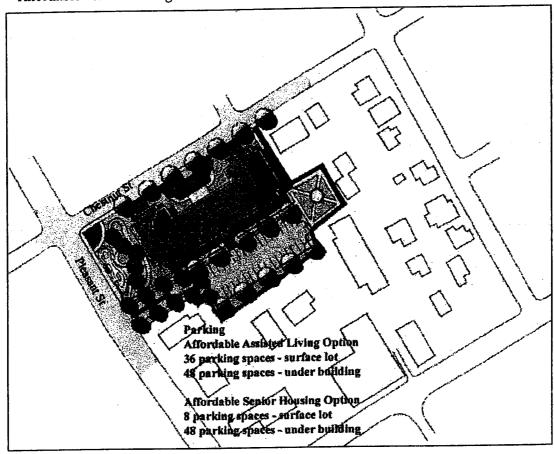
mond broken	<u>n</u>	
Building Fo	otprint	13,400 S.F.
Total Buildin	Total Building Size (1-2 levels)	
Parking –	Surface lot	52 spaces
	Under building	40 spaces
		92 spaces
Total parkin	g required (1/250 sf)	92 spaces

For this option, the amount of building square footage is limited by the amount of parking that can comfortably fit on the site and under the building.



Residential Option

Affordable Assisted Living or Affordable Senior Housing



Building Program Building Footprint Total Building Size (3 levels)		Affordable Assisted Living 15,600 S.F. 46,800 S.F.	Affordable Sr.Housing 15,600 S.F 46,800 S.F.	
Living Units	Studio (350 sf)	55	-0-	
	1 bedroom (500 sf)	36	24	
	1 bedroom (750 sf)	-0-	17	
	2 bedroom	<u>-0-</u>	<u>15</u>	
	Total	91	56	
Parking –	surface lot	36 spaces	8	
_	Under building	48 spaces	<u>48</u>	
	· · · · · · · · · · · · · · · · · · ·	84 spaces (.9 per unit)	56 (1 per unit)	

Page 12 of 35
TERRASPHERE

All three options were reviewed with the City and the Citizen's Advisory Committee. Following is a summary of their comments.

Medical Office

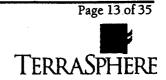
The size of the building that can be placed on the site is limited by the amount of parking that can be placed on the site. A level of parking was placed under the building, which could accommodate 40 spaces. In addition, 52 parking spaces were placed on the site while still providing a buffer to abutting residential uses and preserve some open space in keeping with the neighborhood character. This provided a total of 92 spaces. According to the Marlborough Zoning Bylaw, a medical office requires 1 parking space for each 250 square feet of building space. Therefore, the 92 spaces could support a building of 23,000 square feet.

TerraSphere and the Committee felt the building size was too small for a developer to get a return in their investment. Therefore, this option was discarded.

Affordable Senior Housing

The Committee and the City were very interested in this option. In reviewing this option, they thought that the development would not require as many 2-bedroom units as suggested based on the actual use at other facilities in the community. Therefore, it was determined that the number of 2-bedroom units should be reduced to 10. In addition, after conferring with the manager of other senior housing in Marlborough, the Committee suggested providing one parking space for each unit, as originally proposed, but providing an additional 12 spaces for visitors and staff.

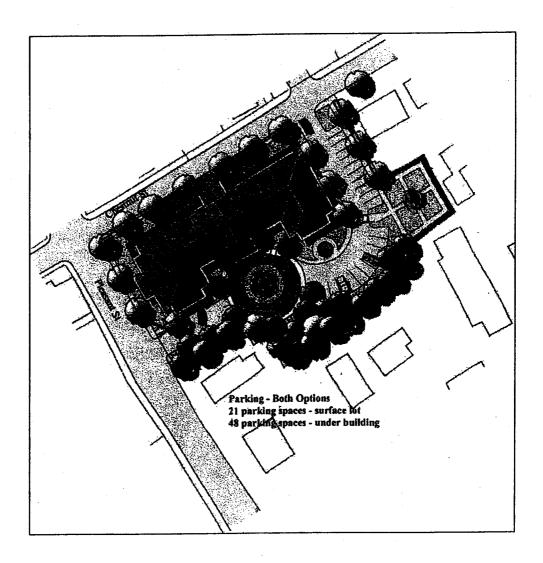
The group also suggested that the building be positioned closer to the intersection of Pleasant and Chestnut streets with a set-back similar to the other buildings in the neighborhood. By shifting the building in this location, it was hoped that additional buffering could be established between the property and adjacent residential uses. They asked that the building still have a "front door" on Chestnut Street, though a drop-off area may be desirable on the interior of the property. Finally, a small sitting area for building residents was desired along Chestnut Street.

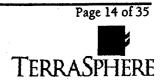


Affordable Assisted Living

The Committee and the City also liked this option. They agreed to keep the building program as it was presented. However, they did recommend repositioning the building closer to the intersection and the other site changes as recommended in the above Affordable Senior Housing description.

In response to these comments, the residential option for the Former Tannery site was modified as shown below.



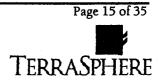


This design option includes the following program elements. An affordable residential use is preferred for the site, and the City and the Committee wanted to keep their options open whether the use would be affordable senior housing or affordable assisted living.

Building Program

	·	Affordable Assisted Living	Affordable Sr. Housing
Building Foot	print	15,600 S.F.	15,600 S.F
Building Footprint Total Building Size (3 levels) Living Units Studio (350 sf) 1 bedroom (500 sf) 1 bedroom (750 sf) 2 bedroom Total	46,800 S.F.	46,800 S.F.	
Living Units	Studio (350 sf)	55	-0-
	1 bedroom (500 sf)	36	24
	1 bedroom (750 sf)	-0-	23
	2 bedroom	<u>-0-</u>	10
	Total	91	57
Parking –	Surface lot	21 spaces	21
	Under building	48 spaces	<u>48</u>
		69 spaces (.5 per unit	69 (1/ unit w/ 12 visitor)
		w/24 staff/visitor)	

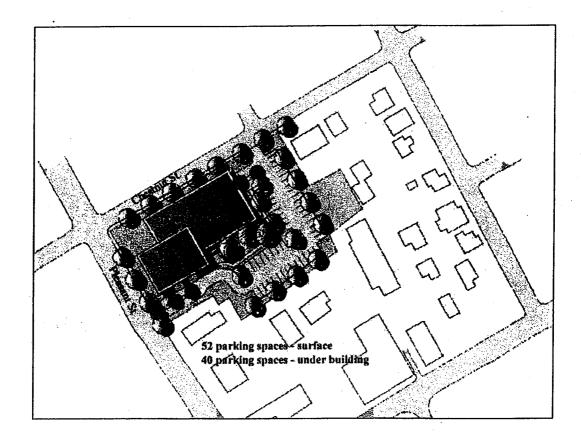


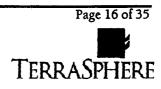


5. CONSTRUCTION COST ESTIMATES

Reuse Alternative #1 - Medical Office

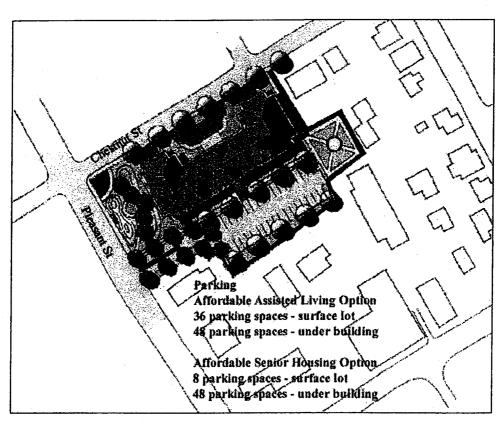
QTY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
		Structures		
23,000	sf.	Total Building (1-2 levels)	\$150.00	\$3,450,000.00
		Utilities and infrastructure		•
1	ls	Water/Sewer/Electric/Gas/Phone/Drain	\$26,000.00	\$26,000.00
		Parking		
40	spaces	Parking Under Building	\$12,000.00	\$480,000.00
		Planting		
33	ea.	Trees	\$800.00	\$26,400.00
16,690	sf.	Landscaping (Lawn/Shrubs)	\$4.00	\$66,760.00
		Paving		
26,933	sf.	Bituminous concrete parking	\$4.00	\$107,732.00
5,057		Concrete Sidewalk	\$7.00	\$35,399.00
		SUBTOTA	AL.	\$4,192,291.00
		20% Contingen	cy	\$838,458.20
		TOTA		\$5,030,749.20





Reuse Alternative #2 - Affordable Senior Housing

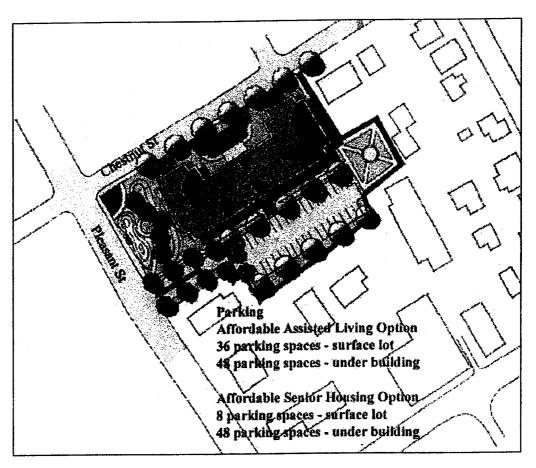
QTY	QTY UNIT DESCRIPTION		UNIT PRICE	TOTAL	
		Structures	· ·		
15,600	sf./level	Building Footprint (3 levels)			
46,800	sf.	Total building	\$125.00	\$5,850,000.00	
		Utilities and Infrastructure			
1	Is	Water/Sewer/Electric/Gas/Phone/Drain	\$26,000.00	\$26,000.00	
		Parking			
48	spaces	Parking Under Building	\$12,000.00	\$576,000.00	
		Planting			
32	ea.	Trees	\$800.00	\$25,600.00	
26,317		Landscaping (lawn/Shrubs)	\$4.00	\$105,268.00	
		Paving			
15,251	of	Bituminous concrete	\$4.00	\$61,004.00	
6,817		Concrete Sidewalk	\$7.00	\$47,719.00	
		Site Improvements			
4	ea.	Benches	\$500.00	\$2,000.00	
		SUBTOTAL		\$6,691,591.00	
		20% Contingency		\$1,338,318.20	
		TOTAL.		\$8,029,909.20	

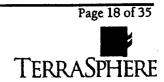


MARLBOROUGH FORMER TANNERY SITE -COMPREHENSIVE REDEVELOPMENT PLAN JUNE 2002 Page 17 of 35
TERRASPHERE

Reuse Alternative #3 - Assisted Living

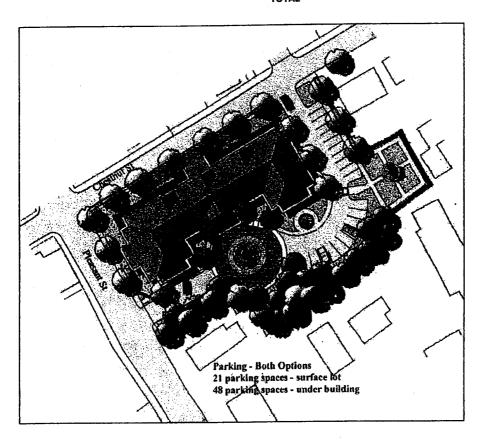
QTY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
		Structures		
15,600	sf./level	Building Footprint (3 levels)		000 00
46,800		Total building	\$125.00	\$5,850,000.00
		Utilities and Infrastructure		
1	ls .	Water/Sewer/Electric/Gas/Phone/Drain	\$26,000.00	\$26,000.00
		Parking		4570 000 00
48	spaces	Parking Under Building	\$12,000.00	\$576,000.00
		Planting		*** *** **
32	ea.	Trees	\$800.00	\$25,600.00
26,317	sf.	Landscaping (Lawn/Shrubs)	\$2.00	\$52,634.00
		Paving		
15,251	sf.	Bituminous concrete	\$4.00	\$61,004.00
6,817	sf.	Concrete Sidewalk	\$7.00	\$47,719.00
		Site Improvements		
4	ea.	Benches	\$500.00	\$2,000.00
		SUBTOTAL		\$6,638,957.00
		20% Contingency		\$1,327,791.40
		TOTAL		\$7,966,748.40





Reuse Alternative #4 – Affordable Senior Housing or Assisted Living Preferred Alternative

OTY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
	, destr			
		Structures		
15,600	sf./level	Building Footprint (3 levels)		#F 050 000 00
46,800	sf.	Total building	\$125.00	\$5,850,000.00
		Utilities and infrastructure	•	
1	ls	Water/Sewer/Electric/Gas/Phone/Drain	\$26,000.00	\$26,000.00
		Parking	•	
48	spaces	Parking Under Building	\$12,000.00	\$576,000.00
		Planting	•	
47	ea.	Trees	\$800.00	\$37,600.00
20,218	sf.	Landscaping (Lawn/Shrubs)	\$2.00	\$40,436.00
		Paving		
9.424	sf.	Bituminous concrete	\$4.00	\$37,696.00
9,741		Concrete Sidewalk	\$7.00	\$68,187.00
3,124		Brick	\$12.00	\$37,488.00
		Site Improvements	4,	
1	ls	Fountain	\$50,000.00	\$50,000.00
8	ea ·	Benches	\$500.00	\$4,000.00
		SUBTO	PTAL	\$6,727,407.00
		20% Conting	ency	\$1,345,481.40
			TAL	\$8,072,888.40



MARLBOROUGH FORMER TANNERY SITE -COMPREHENSIVE REDEVELOPMENT PLAN JUNE 2002 Page 19 of 35
TERRASPHERE

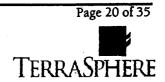
6. REMEDIAL STRATEGY

The property is known as the John A. Frye Shoe Co. Site, as well as the Frye Tannery Site, and is referred to as the "Site". This property is referenced in the Department of Environmental Protection (DEP) database as Release Tracking Number (RTN) 2-11998, a Default Tier IB site.

Review of Existing Environmental Reports

Several environmental assessments and limited remediation measures were conducted at the Site on behalf of the property owners between 1985 and 1991. These include assessment work performed by Bewick Associates, IEP, Metcalf & Eddy and Zecco Corp. In 1998 the City of Marlborough engaged a contractor to remove one 10,000-gallon underground storage tank (UST) and to conduct controlled demolition of on-Site structures. The Site appears in the Department of Environmental Protection (DEP) database as a release of Oil and Hazardous Material as of July 28, 1997. Subsequently, on August 4, 1998, after failing to meet the one year tier classification deadline, the Site was classified as a Tier IB by default. Tier Classification is the process wherein a reported site is scored by a Numerical Ranking System (NRS) to determine the degree of hazard and the level of oversight required by DEP. In the absence of an NRS Score the Site defaults to Tier IB after one year from the reporting date.

In 2000, the City of Marlborough engaged TRC Environmental (TRC) to conduct an Environmental Site Assessment (ESA). As part of their work, TRC completed Phase II of the ESA including test pits, soil borings and the installation of monitoring wells. This TRC ESA document is the most comprehensive of the Site investigations conducted to date. However, due to budget constraints some subsurface features may not be fully characterized, possibly requiring more investigation on-Site. Although the ESA report conforms to the standards of the Environmental Protection Agency (EPA) Brownfields Assessment Demonstration Pilot Program, it was not prepared as a submittal to the MA DEP to meet the requirements of the Massachusetts



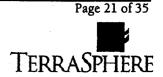
Contingency Plan (MCP). As a result, it is important to note that the DEP will require that future redevelopment work proceed under the standards of the MCP. This does not mean the TRC work is not useful, simply that the Site must be brought through the DEP's phased cleanup system according to its set of regulations.

Data collected during the TRC investigation indicated concentrations of metals and petroleum hydrocarbons in soil and a concentration of cyanide in groundwater at or above reporting thresholds. Concentrations of all other contaminants were below reportable concentrations. From the data ERI reviewed, the concentrations of these contaminants do not exclude residential development and it appears that remediation activities will likely include excavation and disposal of contaminated soils combined with an engineered barrier.

Remediation Strategy

Based on review of the limited amount of Site data available, ERI believes that the most prudent remedial strategy for the Site would be to coordinate future assessment and remediation of the Site with the proposed redevelopment plan, as well as bringing the site through the phased cleanup process. An example of this would be performing disposal characterizations for soils in the areas designated for excavation not simply soils analytical testing. This will prevent duplicative field work and analytical testing. At locations such as building foundations and utility trenches, contaminated soil would be excavated, analyzed, characterized and transported off-Site for disposal at an appropriate facility.

At locations not disturbed by construction, an engineered barrier could be utilized to isolate the soils and decrease remediation costs. Areas outside the building footprint should be assessed for potential exposure during the overall phased assessment of the site. This barrier technology involves placing a layer of clean soil and/or a synthetic membrane, or clean soil and pavement, above the impacted soil to prevent potential access to the contaminated



material. Typically, this technology used in conjunction with an Activity and Use Limitation (AUL) to limit potential exposure to impacted soil during future events (such as construction or redevelopment), and is generally applicable at sites like this one where the mass of subject compounds appears to be relatively immobile in soil, not functioning as an on-going source for ground water impacts, and soil concentrations do not exceed Upper Concentration Limits as defined by the MCP. Using this type of engineered barrier is capable of achieving a Permanent Solution at the site.

A. Remediation Cost Estimate

ERI developed estimated costs to complete additional site assessment, remediation activities and regulatory compliance for the proposed reuse of the property based upon the proposed preliminary development plan. Table 1 details these estimated costs.

B. Steps Required for MCP Compliance

The DEP classified the Site as a Default Tier IB Disposal Site, meaning that a Potentially Responsible Party (PRP) failed to provide a required submittal to DEP by a specified deadline, defaulting the property into a Tier1B status. The following is a summery of tasks that could be necessary to achieve MCP compliance for a Tier 1B site.

1: Release Notification

The owner or PRP must notify DEP of the presence of concentrations of contaminants above Reportable Concentrations (RC) detected in soil and groundwater. The Site owner or PRP should submit a Release Notification Form (RNF), which was due within 120 days of the owner or PRP obtaining knowledge of the condition.

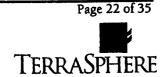


Table 1 Remediation Cost Estimate

THE STATE OF THE S	e devoit	Quantity		Maria Description - Walle	Selection Con	less Estimated Rivers	10/11
TATE OF THE PROPERTY OF THE PARTY OF THE PAR							11.15
Project Management			Dig-safe, scheduling, location selection	Manage field activates	\$3,000	\$2,550 -	\$3,6
Sub-surface Exploration and Assessment			Hydrogeologic analyses, gw elevations, test pits, drilling inspection, sampling wells, etc.	Professional services, sub contractors and miscellaneous expenses	\$20,000	\$17,000 -	\$24,0
aboratory Analyses		<u> </u>	Soils; GW, Soil Vapor	VOC; metals; VPH/EPH/APH	\$15,000	\$12,750 -	\$18,00
Total for Task 1, Additional		L			\$38,000	\$32,300 -	\$45,6
Lanamant						Towns and the second second second second	turk wasten
ZAKOTA DELEREPOR NOSAS	HOMELIA TO	数·克·克纳·克	TOTAL PROPERTY OF THE PARTY OF				
MCP Submittals			PHASE I	Tier Classification	\$2,500	\$2,125 -	\$3,00
			PHASE II CSA	Comprehensive Site Assessment	\$25,000	\$21,250 -	\$30,00
			RAM Plan and 6 Status Reports	Release Abatement Measure for remediation	\$12,000	\$10,200 -	\$14,40
				RISK CHARACTERIZATION	\$15,000	\$12,750 -	\$18,00
			PHASE III	Remedial Action Plan with alternatives	\$7,500	\$6,375 -	\$9,00
			RAO	Response Action Outcome, for permanent closure	\$10,000	\$8,500 -	\$12,00
Public Meetings			Public Meetings	Develop and Participate in Public Information Plan	\$3,000	\$2,550	\$3,60
fetal for Task 2, DEP REPORTS					\$75,000	\$63,750 -	\$90,00
. (1							
Soil Removal	ton		Conteminated Soil	receiving facility disposal fees	\$520,000	\$442,000 -	\$624,00
Vapor Barrier	sq. ft	15,600	Vapor Barrier to contain potential soil gas under building foundation	High density polyethylene	\$78,000	\$66,300 -	\$93,60
Clean Fill	cu. yd	500	Backfill	replace excavated material where needed	\$7,000	\$5,950 -	\$8,40
Fetal for Task 5, SOIL REMOVAL DISPOSAL AND BARRIER	L,		<u> </u>		\$605,000	\$514,250 -	\$726,00
TOTAL CAPITAL COSTS, Tasks	1				\$718,000	\$610,300 -	\$861,60
• 5		CASS OF BUILDING			RESEARCH STREET		
Construction Observation	per day		On-Site magement	Personel directing construction in contaminated areas	\$30,000	\$25,500 -	\$36,00
TOTAL COSTS:					\$748,000	\$635,800 -	\$897,60

2: MCP Phase I, Tier Classification

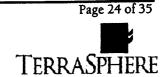
The owner or PRP should contract for a Phase I Report, a document which contains the results of Preliminary Response Actions undertaken at a disposal site. The purpose of a Phase I Report is to record information in a standardized format in order to evaluate the Site and determine its Tier Classification, if necessary. Because a Phase I report has yet to be submitted, the Site is Tier Classified as a Default Tier 1B. When a Phase I report is submitted, it will include a Tier Classification scoring section, which will determine the Site's true DEP classification category. (The DEP uses Tier Classifications to determine the appropriate level of Departmental oversight for response actions conducted at disposal sites.)

3: Prepare MCP Phase II Scope of Work

Subsequent to the Phase I Report, the MCP requires preparation and submittal of a Phase II Scope of Work (SOW). If any new Tier Classification does not re-classify the Site from its Tier 1 status, this SOW will require direct DEP involvement. ERI believes that this Site will require Public Involvement Plan, which, along with direct DEP involvement, can increase costs.

4: Conduct MCP Phase II Comprehensive Site Assessment

The next step following the Phase II SOW is proceeding with a Phase II Comprehensive Site Assessment, which further assess the nature and extent of contamination in soil and groundwater at the Site. Additionally a Risk Characterization is required under Phase II to evaluate the risk of harm to health, safety, public welfare, and the environment posed by the presence of Oil and Hazardous Materials (OHM) at the Site under current and reasonably foreseeable activities and uses.



As mentioned in the above Remediation Strategy section, ERI believes additional subsurface exploration and analytical testing would be completed as part of the Phase II Comprehensive Site Assessment. Included in the exploration is the request and confirmation of underground utility marking with DigSafe and municipal utilities (i.e., Sewer Dept., Water Dept.), as well as the direction of a drilling subcontractor to install monitoring wells.

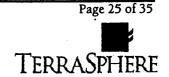
The focus of the subsurface exploration should be on the area of proposed construction, as well as unexplored areas of the site. All soil and groundwater samples should be analyzed at a laboratory certified by the DEP, and all field activities should be conducted in accordance with DEP regulations and any other state or federal regulations and/or policies that may be applicable.

5: Preparation and submittal of Phase II Report and Completion Statement

The consultant preparing the Phase II should evaluate the data collected and develop tables and figures to address the following elements of the report; disposal site history, site hydrogeology, fate and transport of oil, nature and extent of contamination, exposure assessment, Risk Characterization and a conclusion to support the outcome of the investigation. Additionally a Phase II Completion Form should be appended to the submittal.

6: Prepare MCP Phase III Remedial Action Plan

The MCP requires an evaluation as to the extent of Site contamination requiring remediation. This analysis includes screening remedial technologies, developing remedial alternatives, performing a comparative evaluation of remedial alternatives, and selecting preferred remedial alternatives. Upon selecting the appropriate remedial alternative (see above Remediation Strategy section) the consultant should develop a



7. LIABILITY RELIEF FOR THE CITY OF MARLBOROUGH

There are several mechanisms the City of Marlborough can use to minimize its risk of potential liability associated with redeveloping the Old Train Depot and facilitating the development of the Frye Shoe site. The key mechanisms for liability relief are outlined below, followed by a recommended strategy for each of the two sites.

Risk Management Mechanisms

A. Innocent Owners Liability Protection

The innocent owner or "eligible person" status is the cornerstone of the liability relief provided under the Commonwealth's Brownfields program. An "eligible person" is an innocent owner or operator of a contaminated site who did not own or operate the site at the time the contamination was released and did not cause or contribute to the contamination. Marlborough would be an eligible person upon acquisition of the Frye Boot Site. Eligible persons are relieved from liability when they complete a permanent cleanup or achieve remedy operation status ("ROS"). The liability relief automatically vests upon filing a Response Action Outcome Statement or ROS submittal. This status protects the eligible person from Commonwealth claims for response action costs and natural resource damages and from third-party claims for contribution, response action costs and property damage claims under Chapter 21E and common law. In order to maintain this exemption, the eligible person must meet certain requirements, including notifying DEP of unreported contamination, providing access to people conducting response actions, and settling any response action costs incurred by the Commonwealth in connection with the site.

B. Brownfields Covenant Not to Sue

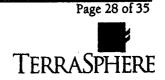
Parties who do not qualify for the "eligible person" liability protection or want additional liability relief may be eligible for a Brownfields Covenant Not to Sue. Parties who can benefit for a covenant not to sue include "eligible persons" who can only achieve a temporary cleanup and cannot reach the permanent solution required for the eligible person liability endpoint. Liable parties may be able to get a covenant not to sue under certain circumstances. In the case of Marlborough, a covenant that allows the liability relief to vest upon taking title, instead of at the end of the cleanup, would provide the City with much broader liability protection.

To obtain a Covenant Not to Sue, the City will have to apply to the Office of the Attorney General. The City would have to negotiate the terms of the liability relief and must demonstrate that the project will contribute to the economic or physical revitalization of the community in which it is located. This plan explains both economic and physical revitalization improvements that will be made to the community. It is important to note that the covenant usually stipulates certain liability re-openers in the event that the City fails to meet conditions or terms of the covenant.

C. Municipal Tax Foreclosure

A 1994 revision to M.G.L c. 21E exempts municipalities from liability when they foreclose on contaminated properties for nonpayment of taxes, provided they did not cause or contribute to the contamination. This provision requires the municipality to comply with the following conditions in order to obtain and maintain this exemption. The municipality must notify DEP upon learning of the contamination, provide access to people conducting response actions, prevent exposure of persons to the contaminants, address any imminent hazards and it must act diligently to sell or otherwise divest of

¹ Remedy Operation Status is achieved when the active remediation is complete and the only remediation that remains is to operate a treatment system (e.g., a pump and treat system) that will eventually result in a permanent cleanup.



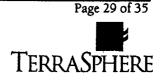
ownership or possession of the property. Until the 1998, municipalities were given five years to divest. In 1998 this provision was revised to simply require the municipality to act diligently to divest. If the municipality decides to retain the property for its own use, then it must remediate the site.

D. Redevelopment Authorities and Community Development Corporations (CDC)

The 1998 Brownfields Act created a new liability exemption for redevelopment agencies and authorities, Community Development Corporations (CDCs) and Economic Development and Industrial Corporations (EDICs). These agencies are exempt from liability for contamination at any property they acquire after August 5, 1998 as long as they comply with the following requirements: the agencies must notify DEP of any unreported releases on the site, provide access to people who are conducting response actions, prevent exposure of people to contamination and take immediate response actions where needed. To maintain the exemption these agencies must continue to meet these requirements and they must act diligently to divest themselves of the property. If they decide to retain the property for its own use, they must remediate the site, in accordance with Chapter 21E.

E. Governmental Bodies or Charitable Trusts

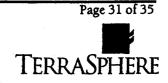
Governmental bodies or charitable trusts who hold property restrictions created for the public benefit pursuant to c. 184, section 32 (conservation, agricultural preservation, watershed preservation and affordable housing restrictions) are exempt from liability under Chapter 21E if they comply with the following requirements. To obtain and maintain the exemption these governmental bodies or charitable trusts cannot cause or contribute to the contamination and cannot control activities at the site except as necessary to enforce their rights under the restriction, cannot own or operate the contaminated site and they must provide notice to DEP of any unreported release.



- Brownfields Redevelopment Access to Capital (BRAC) BRAC is a state program that offers economical environmental insurance for properties located in Massachusetts. The program offers environmental liability and cost cap insurance for Massachusetts businesses that own or operate contaminated properties. The program has recently agreed to offer this coverage to municipalities that acquire contaminated land for open space and parks. The policy is pre-negotiated to insure good terms and coverage. If the business or municipality is using debt financing, including any type of governmental bond financing, the BRAC program will subsidize fifty percent of the cost of the policy premium.
- Process for Obtaining Insurance To get insurance, the applicant (city
 or new owner) must complete an application, including financial
 information, provide copies of all environmental reports and studies to
 the insurer. For cost cap coverage, the applicant must also give the
 insurer a detailed proposed scope of work. The additional material that
 would not be available from the work for EPA would be the application
 and the scope of work.

G. Site Specific Risk Management Strategies for the Frye Boot Site

The Frye Boot Site is currently vacant and abandoned. The city plans to take this property through the tax title process and sell it to a new owner to cleanup and reuse the property. The City will have minimal control over the property and accordingly it is unlikely to incur liability with respect to this property. Under the Municipal Tax Foreclosure provision, the City is exempt from liability if it forecloses on the property and then acts diligently to divest of its ownership or possession of the property. One scenario that City could employ is not taking the property for taxes until a developer is selected for the site. Once the selection is made, the city could foreclose on the site and immediately transfer the property to the developer. A key to a quick sale and turnaround of this property will be the City's ability to show prospective



purchasers how to limit their liability. The following recommendations can assist the City towards this end.

- 1. <u>Brownfields Covenant Not to Sue</u> A Brownfields Covenant Not to Sue for this property could be negotiated to apply to the City and to the subsequent purchaser. This covenant should vest up front, providing liability protection upon acquisition and prior to completion of the cleanup.
- 2. <u>Due Diligence</u> The City should provide the prospective purchaser with all available information regarding the environmental conditions at the site. The more information the purchaser has, the easier it will be for the purchaser to do a complete and adequate cleanup and for the purchase to procure a solid environmental insurance policy.
- Environmental Insurance The City can provide prospective purchasers
 with information regarding environmental insurance and information
 about the state subsidized environmental insurance that is available
 through the BRAC program.
- 4. Third-Party Intermediary If the City determines that it is unlikely to find a developer who can cleanup and reuse the property, the City should consider either: (i) conducting the site remediation itself and then selling the property or (ii) transferring the property to a community development corporation ("CDC") or an economic development agency that is exempt from liability under G.L. c. 21E § 2. This CDC or agency would conduct the site remediation and then sell the property after the remediation is completed.

8. PUBLIC FUNDING SOURCES FOR BROWNFIELDS REDEVELOPMENT: GRANTS, LOANS AND TAX INCENTIVES

OVERVIEW

Over the past several years, numerous federal, state and local agencies have established programs to provide grant, loans and tax incentives to encourage municipal and private sector investment in the assessment, cleanup and redevelopment of brownfields sites. The following is an overview of several of the public grants, loans and tax incentives that BRC would suggest pursuing to cover costs associated with additional site assessment activities at the Frye Boot and Old Train Depot sites in Marlborough, Massachusetts, and to support the remediation and redevelopment of these properties. In some cases these programs require the City of Marlborough to be the applicant, while in other programs a prospective owner/developer can apply for the incentive directly.

A. SITE ASSESSMENT FUNDS

Grant/Loan – MassDevelopment: MassDevelopment provides low-interest loans and grants of up to \$50,000 for site assessment activities properties located in EDAs. Criteria are similar to that outlined above for remediation funds. Applicants who receive site assessment funding and do not proceed with the project, must transfer their site assessment results to MA DEP.

Grant – EPA Targeted Site Assessment Grants: EPA provides grants of \$50,000 for site assessments on abandoned or town-owned sites. Only governmental and non-profit entities are eligible.

Grant – EPA Brownfields Assessment Demonstration Pilot: Already awarded to the City of Marlborough and being used for these properties.



B. REMEDIATION

Grant/Loan – MassDevelopment: MassDevelopment administers the Brownfields Redevelopment Fund to provide grants and low-interest loans of up to \$500,000 for the remediation of brownfields sites located in EDAs. ² Grants require a 20% match from the applicant. Funds for loans are determined on a project specific basis. Awards can be made to municipalities, redevelopment authorities and agencies, economic development and industrial corporations, community development corporations, and economic development authorities. Private companies can received loans, but not grants.

Grant – CDBG/Section 108/EDI/BEDI: The Massachusetts Department of Housing and Community Development ("DHCD") administers Community Development Block Grants ("CDBG") and Section 108 loan guarantees, which may be used for site remediation activities. Economic Development Initiative ("EDI") grants provide additional financial assistance for development projects that are financed in part by Section 108 federal loan guarantees. Brownfields Economic Development Initiative ("BEDI") grants come from a separate pool of capital and target brownfields-related projects.

Grant – EPA Remediation Grants: The 2002 Federal brownfields law, enacted on January 11, provides additional funding for EPA to make direct grants to public entities to help cover the costs of site remediation. EPA anticipates issuing 25 awards annually through a national competition. Applications will be available in the fall of 2002 with the first awards made in the spring of 2003.

Subsidized Insurance – Brownfields Redevelopment Access to Capital: BRAC is a subsidized insurance program, administered by the Massachusetts Business Development Corporation, for lenders and developers. It is based on

² MassDevelopment can award up to \$2 million to "priority projects," but neither of the proposed projects Marlborough is likely to qualify for this designation.



two state-negotiated policies provided by AIG to: (1) pay for unanticipated costs associated with an approved cleanup; and (2) protect lenders from defaults on private loans made for cleanup and redevelopment, up to \$500,000 (requires equal private investment). BRAC will subsidize the insurance (up to 50% of the premium) for up to a five-year term if the project is located in an EDA. The types of insurance covered include: (1) cost cap; (2) environmental liability; and (3) secured creditor (or lender) insurance.

Tax Credit – Massachusetts Brownfields Tax Credit: The Massachusetts Brownfields Tax Credit allows taxpayers to take a credit of 25% of their cleanup costs upon completion of the cleanup (50% if the cleanup does not require restrictions on future land use). Cleanup costs must be greater than 15% of the assessed value of the property prior to remediation.

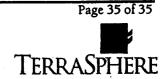
MassDevelopment and BRAC funds are not eligible for the credit.

Tax Incentive – Federal Brownfields Tax Incentive: The Federal Brownfields Tax Incentive allows eligible environmental cleanup costs to be fully deductible in the year incurred. Massachusetts Department of Environmental Protection ("DEP") must certify that the site is contaminated with a hazardous substance.

C. REDEVELOPMENT INCENTIVES

Tax Benefits – EDIP/TIF: EDIP provides state and local tax benefits to projects that locate or expand in an EOA within designated ETAs.

Municipalities can use the state and local tax benefits of ETA designation as an incentive to attract new businesses to cleanup and redevelop brownfields sites – i.e., the tax breaks can be used to offset cleanup costs. In particular, municipalities may find it useful to negotiate Tax Increment Financing ("TIF") agreements that provide the greatest tax relief during the years when the highest cleanup costs will be incurred.



9. ATTACHMENTS

Site Location Diagram
Existing Conditions Photos
Access Diagram
Current Zoning Diagram
Land Use Diagram
Utility Plan
Context Diagram



City of Mariborough 140 Main Street Mariborough, Massachusetts 01752 COMPREHENSIVE REDEVELOPMENT PLAN **CURRENT ZONING** FRYE BOOT SITE, MARLBOROUGH, MA PREPARED FOR: PREPARED BY: ZONING CLASSIFICATION RESIDENCE - B
RESIDENCE - C
BURNESS
STUDY AVEA LEGEND

1" = 100-0"

LAND USE HOW AND STREET LEGEND LAND USE LEEDINS NOOM! THE STREET PLEASANT STREET

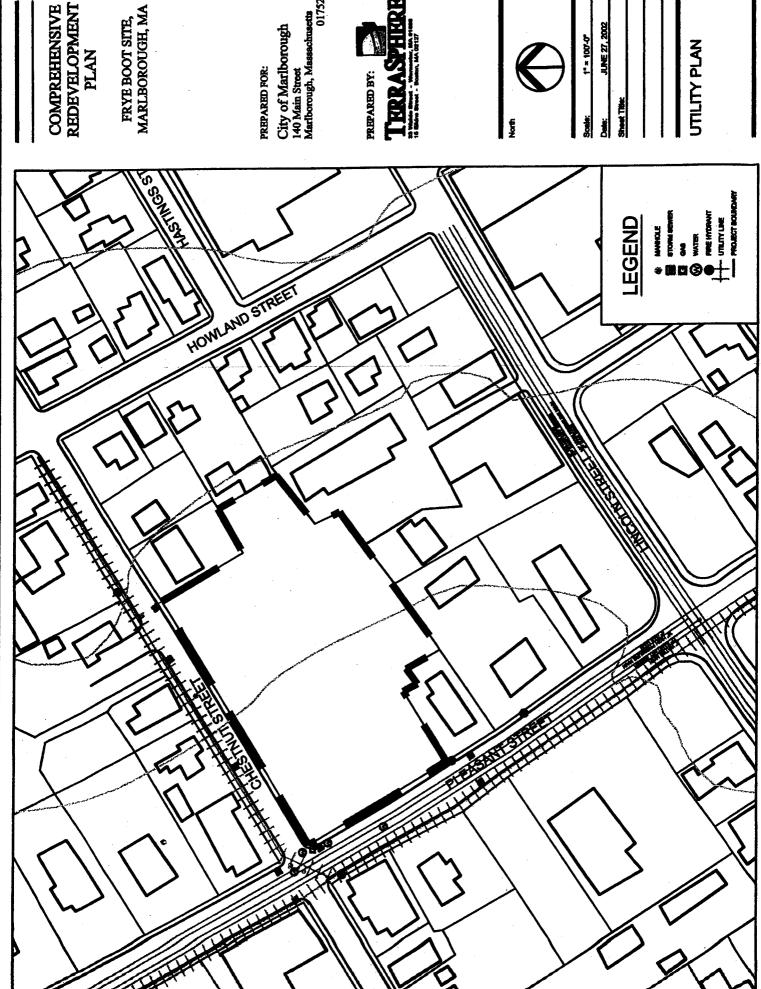
COMPREHENSIVE REDEVELOPMENT **PLAN** FRYE BOOT SITE, MARLBOROUGH, MA

PREPARED FOR:

Outy ve ---140 Main Street
Mariborough, Massachusetts
01752 City of Marlborough



1 = 100.0



COMPREHENSIVE



COMPREHENSIVE REDEVELOPMENT PLAN

FRYE BOOT SITE, MARLBOROUGH, MA

PREPARED FOR:

City of Marlborough 140 Main Street Marlborough, Massachusetts 01752

